

MEDIUM-SIZED PROJECT PROPOSAL REQUEST FOR GEF FUNDING

GEI

AGENCY'S PROJECT ID: GF/ROM/06/XXX

GEFSEC PROJECT ID: 2715

COUNTRY: Romania

PROJECT TITLE: Capacity Building for

Environmentally Sound Management of PCB

GEF AGENCY: UNIDO

OTHER EXECUTING AGENCY(IES): National

Research-Development Institute for Environmental

Protection - ICIM **DURATION:** 2 years

GEF FOCAL AREA: Persistent Organic Pollutants

GEF OPERATIONAL PROGRAM: OP 14 **GEF STRATEGIC PRIORITY:** POP 2 -

Implementation of Policy/Regulatory reforms and

investments

ESTIMATED STARTING DATE: January 2007 IMPLEMENTING AGENCY FEE: US\$ 90,000

FINANCING PLAN (US\$)									
GEF PROJECT/COMPONENT									
Project	952,000								
PDF A*	48,000								
Sub-Total GEF	1,000,000								
Co-FINANCING**									
GEF Agency:	20,000								
UNIDO (in-kind)									
Romanian Government	200,000								
Romanian partners (in-	800,000								
cash)									
Others:									
Sub-Total Co-financing:	1,020,000								
PDF-A Co-financing	5,000								
Total Project	2,025,000								
Financing									
FINANCING FOR ASSOCIA	TED								
ACTIVITY IF ANY:									

^{*} Indicate approval date of PDFA: 16 March 2005

CONTRIBUTION TO KEY INDICATORS OF THE BUSINESS PLAN:

RECORD OF ENDORSEMENT ON BEHALF OF THE GOVERNMENT:

Date: January 11, 2006

Mr. Silviu Stoica General Director GEF Operation Focal Point Ministry of Environment and Water Management Bucharest, Romania

This proposal has been prepared in accordance with GEF policies and procedures and meets the standards of the GEF Project Review Criteria for approval.

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Date: 13 Dec. 2006

^{**} Details provided in the Financing Section

PART I - PROJECT CONCEPT

A - SUMMARY

A.1. PROJECT RATIONALE

- 1. The National Implementation Plan (NIP) for the Stockholm Convention for Romania identified the polychlorinated biphenyl (PCB) issues as one of the top priorities requiring immediate attention and action. The confidence on UNIDO assistance in the development of the NIP and its action plans provided the rationale to continue the PCB-related activities with a Medium Sized Project (MSP).
- 2. The GEF grant through this proposed project will consolidate ongoing and baseline activities of the government towards the implementation of its obligations for PCBs elimination. The project will demonstrate the implementation of locally viable and environmentally sound PCB control measures and their incorporation into a national policy framework. Ultimately, this will facilitate the sustainable reduction of PCBs in Romania through a subsequent scaling-up demonstration, so that a more efficient and cost-effective approach for PCB destruction will be available for PCB owners.
- 3. The country needs the necessary infrastructure to manage PCBs and PCB-containing equipment in an environmentally sound manner. There are no specialized PCB treatment disposal facilities in the country. In this regard, there is a well-recognized need to increase awareness and to train government officials and specialists from industries on criteria for environmentally sound management, including final disposal, of POPs as waste in the context of the Stockholm and Basel Conventions. The country has little experience in the practical management of PCBs. Although several international and local companies have disposed of limited volumes of PCB containing equipment, there has been no government-driven national or local management plans implemented.

A.2. PROJECT OBJECTIVES

4. The objective of the project is to overcome the current barriers, which impede the implementation of the PCB-related obligations under the Stockholm Convention in Romania. The MSP foresees the strengthening of an environmentally sound management (ESM) system of PCBs based on a consensus between relevant government authorities, private and public sectors and NGOs. The project will create a sound environment for all PCB-related activities. The aim is that all activities should be undertaken in a controlled and coordinated manner by protecting human health and the environment from the harmful effects of PCBs. The GEF resources will be used to establish the necessary environment for the implementation of the ESM and to develop a sustainable mechanism to complete the PCBs disposal in the country. Global significance is that the lessons learned in the project can be replicated in other countries having similar barriers in meeting their obligations under the Stockholm Convention.

A.3. PROJECT OUTCOMES

- 5. The main outcome of the project will be the increased national capacity to manage PCBs in an efficient and environmentally sound manner, including human capacity, improved regulations, financing options and physical facilities management of PCB. It will be achieved through the development of a nationwide ESM system, which mobilizes all concerned parties to participate in implementing the PCB related obligations under the Stockholm Convention and facilitates their participation by improving the regulation, increasing awareness, establishing a financial mechanism for phase out and disposal of PCB and PCB wastes, demonstrating the system at selected regions and training local specialists in different aspects of PCB management.
- 6. The ESM system will include:
 - a relevant regulation updated according to the obligation under the Stockholm Convention, European Union directives, and other international environment-related instruments/agreements;
 - a detailed guidelines for managing PCBs, PCB-containing or PCB-contaminated equipment and wastes;
 - a resource mobilization mechanism for owners of PCBs and PCB wastes;
 - the availability of trained specialists; and
 - improved monitoring and demonstration facilities, etc.
- 7. Project implementation will raise awareness concerning PCBs, assist in developing safety measures for personnel servicing of PCB-containing equipment, prevent further contamination of equipment and environment by PCBs, provide the environmental authorities with capabilities for environment monitoring and management at the national and local levels. The preliminary inventory of PCBs conducted during the Enabling Activities project showed the scope of problems in Romania and the treatment of this POP was given the top priority in the NIP. However, a more detailed ownership, concentrations, locations and present conditions of PCB wastes and PCB-containing equipment need to be identified to define the safe and most economical technology disposal and treatment options.
- 8. Field implementation of the ESM system in selected demonstration areas will lead to:
 - develop a detailed PCB inventory of the electrical equipment, articles and wastes;
 - upgrade laboratory capacity to analyse PCBs in oils and soil;
 - establish a database on the electrical equipment, which is in a most critical condition;
 - establish proper interim storage locations for the equipment withdrawn from use; and
 - reduce risks for environmental pollution through phasing out and disposal.

- 9. Pilot disposal operations and the countrywide inventory estimates will assist the government to allocate the necessary resources for the implementation of all requirements under the Stockholm Convention concerning the full-scale and safe disposal of PCBs in Romania.
- 10. The project will also provide a replicable model of cooperation between the government, public and private entities in addressing global environmental challenges.

Coordination

11. The Government of Romania through the Ministry of Environment and Water Management (MEWM) nominated the National Research-Development Institute for Environmental Protection (ICIM) to be the National Executing Agency (NEA) and to provide coordinating activities at the country level. The institute expertise has been proven through their leading role in the country during the development of the NIP. Task teams will be established for the implementation of the activities of the project. The Project Steering Committee (PSC) will undertake project related decisions and evaluations at the country level. The overall implementation of the project will be supported and monitored by UNIDO.

B - COUNTRY OWNERSHIP

B.1. COUNTRY ELIGIBILITY

- 12. Romania is a country with economy in transition. It ratified the Stockholm Convention on POPs on 28 October 2004 by Law No. 261. Romania, with the GEF assistance developed the NIP as per Article 7 of the Convention. The NIP was endorsed in 2004 and submitted to the Conference of Parties (COP) in April 2006.
- 13. Article 12 of the Stockholm Convention states that appropriate technical assistance to parties with economies in transition shall be made available, to assist them, taking into account their particular needs, to develop and strengthen their capacity to implement their obligations under the Convention. Article 13 indicates that new and additional financial resources shall be made available to enable parties with economies in transition to meet the agreed full incremental costs of implementing measures, which fulfill their obligations under the Convention.
- 14. The project reflects national priorities set out in the NIP. The terms of reference and the resources of the GEF/UNIDO Enabling Activities project required the development of the preliminary inventories on POPs in Romania, which were sufficient to define PCBs and PCB wastes as the highest priority area for future actions. However, a more detailed inventory of PCBs will be necessary to elaborate a feasible ESM system.
- 15. The project has also the support of the country, which is reflected in the endorsement letter. It will improve the global environment by introducing a sustainable PCB management system, which will enable authorities, NGOs and PCB owners to work jointly in managing

PCBs in an environmentally sound manner. It also advances the prospect of reducing risks to the environment and to the human health.

B.2. COUNTRY DRIVENNESS

- 16. The National Implementation Plan has been developed through the GEF grant with UNIDO assistance. All national stakeholders participated jointly and proactively in this process. Their joint actions resulted in the establishment of a non-formal system of cooperative approach of tasks among government agencies, industries and NGOs. The stakeholders showed strong commitments towards the implementation of the formulated needs and readiness to continue the cooperation by implementing the crucial measures of the NIP. The summary of the NIP is attached as Annex IV.
- 17. The Romanian NIP identified eleven key objectives based on Priority Setting Criteria. These criteria depend on the extent, which a particular key objective in the national environmental protection strategy is addressed, on the scope of POPs related health and environmental problems and on the needs of immediate actions to be undertaken by responsible parties. These priorities including relevant activities of the NIP have been discussed with concern ministries, industries, NGOs, academia and community based organizations. The list of key objectives is given in Table 1 below.

Table 1. Priorities and key objectives of the Romanian NIP

Priority	Key Objectives
I^1	To eliminate pesticides stockpiles and wastes
II	To eliminate existing stocks of PCBs
III	To eliminate unidentified POPs (presumed to be POPs)
IV	To prohibit the production of POPs and other substances that might be included in the POPs list in the future
V	To strive for the sustainable development of ecological agriculture
VI	To enhance the production and use of "cleaner" and more economical substances to be used for fighting disease vectors and/or arthropods causing discomfort
VII	To improve environmental performance in the energy sector
VIII	To improve environmental performance in the transportation sector
IX	To improve transportation management in the urban sector
X	To improve environmental performance in the industrial sector
XI	To reduce POPs emission nuisance from waste incinerators

Source: The National Implementation Plan for Romania pg. 86

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¹ Priority I is currently under implementation by the Government jointly with EU.

- 18. Priority II is to eliminate existing stocks of PCBs. It includes identification and inventory of PCBs, the management of stockpiles and the disposal of PCB wastes in an environmentally sound manner.
- 19. Safe disposal of PCBs will contribute to the implementation of Priority VII through improvement of performance in the energy sector. It will further address Priority X by enhancing the industrial sector.
- 20. Romania signed the Europe Agreement in 1993 and became involved in the various mechanisms of the so-called 'structured relationship' involving the Central and Eastern Europe (CEE) countries in political dialogue with the EU, which culminated in the Accession Treaty of Romania. It was signed in Luxembourg on 25 April 2005 and was ratified by the Romanian Parliament in a special plenary session on 17 May 2005. It provided sufficient progress in the implementation *acquis* and in the preparation for assuming the obligations of the membership. The accession is foreseen for 1st January 2007. In the accession treaty, Romania has committed itself to fulfill the strict environmental requirements of the EU. The country has not asked for special delays in PCB withdrawal and disposal. This sets 2010 as a final deadline for the use and disposal of all PCB wastes and PCB-containing equipment.
- 21. Most of the short-term objectives presented in the accession treaty have been realized or will be implemented in the near future. Therefore, in the environmental sector, the focus is now on the medium-term objectives of the Accession Roadmap for 2004 to 1010 as follows:
 - to finalize the full transposition of the EU environmental *acquis* (for PCB it is 96/59/EC of 16th September 1996);
 - to strengthen the capacity and capability of the government environmental institutions in order to effectively implement and enforce the new environmental legislation and standards;
 - to develop and implement a full environmental monitoring system for supporting the elaboration of effective environmental policy plans and complying with EU monitoring and reporting requirements.
 - to realize integration of environmental policy in other sectoral policies;
 - public-awareness raising and public involvement in the decision-making process; and
 - environmental protection, conservation and sustainable use of natural resources.
- 22. The Romanian environmental policy is an integral part of the national economy and territories planning strategies. Aiming at sustainable and consistent economical development, environmental protection measures were developed as part of the strategy for sustainable development in 1999. A new strategy for sustainable development until 2025 is under preparation. An Inter-Ministerial Committee has been established to ensure the integration of the environmental protection requirements in the sectoral policies and strategies at the national level. Its mandate *inter alia* is to analyze and comment on all environment related policies, strategies and legislations. The Inter-ministerial Committee has an important role in promoting and updating the National Environmental Action Plan

- (NEAP) and assessing the accomplishment status of the National Plan for the Adoption of the *Acquis Communitaire* on environmental protection.
- 23. The project foresees a regular collaboration with this committee in order to ensure that the measures and activities are in line with the NEAP and sustainable development policies.
- 24. The identified NIP priorities, the accession to the EU and the conformity to the NEAP provide the appropriate enabling environment for an effective implementation of this project.

C – PROGRAM AND POLICY CONFORMITY

C.1. PROGRAM DESIGNATION AND CONFORMITY

- 25. The GEF Operational Programme on Persistent Organic Pollutants (POPs) foresees financial assistance to countries with economies in transition in three areas: capacity building, on-the-ground interventions and targeted research. This project falls primarily under the capacity building activities at the national level, and, secondly, it targets on-the-ground interventions.
- 26. The capacity building activities of the project are in line with the GEF priorities, which aim to support the:
 - development of economic instruments to promote and facilitate environmentally sound management of POPs, development of institutional mechanisms for integrated management of POPs;
 - strengthening and harmonization of the policy and regulatory framework for integrated and cross-sectoral approaches to POPs management;
 - strengthening of monitoring and enforcement capacity to ensure compliance with regulatory controls; and
 - development of capacity to assess management practices, to promote and facilitate the transfer of viable and cost-effective options and the management practices based on the application of international standards.
- 27. The project activities are in consistence with the GEF priorities for on-the-ground interventions. Proposed activities fall under the category of environmentally sound management of stockpiles and the disposal of wastes that contain POPs. Activities eligible for GEF funding include:
 - identification and environmentally sound management of POPs stockpiles;
 - identification, containment and stabilization of wastes that contain POPs and related affected areas; and
 - environmentally sound destruction of wastes that contain POPs.
- 28. The project will also contribute to global environmental objectives. Through the development and introduction of environmentally sound management system of PCBs, the possibility of environmental contamination and human exposure to PCBs will be reduced.

By disposing of the equipment and waste, which are in the most critical condition, the risk of PCB releases to the global atmosphere, soil, and water bodies will also be eliminated. The project targets to test 8,000 pieces of equipment in three demonstration areas and to dispose of 300 tonnes of electrical equipment. Additionally, the project will facilitate the achievement of goals of two global treaties, the Rotterdam Convention on the Prior Informed Consent Procedures for Certain Hazardous Wastes and the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal.

C.2. PROJECT DESIGN

Baseline scenario

- 29. Romania prepared its NIP under the Stockholm Convention in 2004. The summary of the NIP is attached as Annex IV. During the NIP development, weaknesses of the current legal and organizational aspects of PCBs were identified. The preliminary PCB inventory of the NIP is mainly based on the previous official documents. Due to lack of time and funds, the inventory process has been unable to undertake site inspections and physical testing. These shortcomings were identified during the NIP development and received great attention. The PCB issue was identified as one of the most important priorities of the NIP and the specific action plan on PCB has indicated the necessary actions to resolve this issue. This MSP is a detailed elaboration of that action plan.
- 30. During the PDF-A phase of developing the MSP, field visits were launched to collect as much information as possible to map the situation and to define the proposed actions. A workshop with the participation of all principal stakeholders was organized in Bucharest where the concept of the future MSP was discussed.
- The preparatory work shows that the legal background for a sustainable PCB management needs to be improved. There is no legal act concerning the handling and treatment of PCBcontaining equipment. A management system for PCBs has not been developed either. The EU accession of the country resulted in the adoption and enacting of certain legislations such as Governmental Decision No. 173/2000 on the management and control of PCB, which set 31st December 2010 as a deadline for using equipment containing PCB in concentrations between 50 - 500 ppm and volumes higher than 5 dm³, and 15 September 2006 for using equipment, which contains PCB in concentrations higher than 500 ppm and volumes higher than 5 dm³. Governmental Decision 291 of 7 April 2005 amended this regulation and set the ultimate deadline for withdrawing equipment containing PCBs higher than 50 ppm for 31st December 2010. Further adaptation towards full compliance of the EC regulations is under preparation. Involved ministries and authorities are aware of the PCB issue, but the local authorities lack the necessary knowledge and expertise. These institutions are generally understaffed and cannot cope with the increased workload and requirements. The inter-ministerial communication, reporting measures and practices have not yet been developed.
- 32. The need for an organized system, which includes governmental stakeholders, NGOs and the private sector, has been identified, but due to lack of human resources, expertise, and funding, this organized system has never been applied.

- 33. The preliminary inventory during the NIP development identified a total of 3,391 tonnes of PCBs and PCB wastes. This survey covers eight areas namely Tg, Jiu, Mintia, Slatina, Zalau, Bucuresti, Sibiu and Miercurea Ciuc. Most of the Romanian PCB owners have not submitted any data because they were either unaware on the requirements on PCBs or no analytical data on PCB in their equipment. During the PDF-A phase, additional efforts have been made to obtain a more accurate estimation of volumes of PCBs and PCBs wastes. These figures have been discussed at the national workshop held in July 2005 where participants agreed that the estimation of the PCBs had to be increased by 1.5-2 times. The uncertainty of the data makes the planning for phasing out and disposal of PCBs difficult and it places uncertainty on the scope of measures required to solve the problems and barriers for any initiatives in this issue at the governmental level. An abstract from the preliminary inventories is attached as Annex V.
- 34. The private sector is mostly reluctant to implement the PCB containment, phasing-out and disposal measures due to lack of national regulations. The SC Electrica SA, a major user of electrical equipment, is aware of the problem. It is a state-owned company, subordinated to the Ministry of Economy and Commerce, which is under privatization process. Its core activity is electricity generation, distribution and provision of the infrastructure of communications and information technology. The company's main activities are the operation and development of the systems for the distribution and supply of electricity. The company has 1,222 substations with several transformers at each station and more than 61,000 distribution transformers. Other services include the maintenance of electrical installations, repair of electrical equipment, auto and commercial transportation.
- 35. The development in the legislation related to the basic activities of the electrical power sector has led to regulations enforced by the National Energy Regulatory Authority (ANRE) for electricity generation, transmission, distribution and supply. The SC Electrica SA operates its economic activities as a natural monopoly, with the obligation to ensure access to its networks for all customers, suppliers and electricity generators.
- 36. The NIP identified that many owners of PCB-containing equipment do not have the established procedures and safety measures for servicing, maintenance and disposal of the equipment. The compulsory guidelines for the procedures for inventory taking, labeling, reporting format of these activities as well as the guidelines for withdrawal and disposal of PCB-containing equipment and a feasible and sustainable solution for the management of PCB are still to be developed by the government.
- 37. The condition of the electrical equipment and wastes storage locations and their maintenance practice have been reviewed and checked during the field visits. According to the survey, the visited electrical equipment and storage locations were in many instances in unacceptable conditions. There is a necessity to introduce environmental monitoring measures at these locations for the early identification of PCB contamination. Due to low awareness and lack of proper instructions for personnel, the maintenance practice was designed without preventing a possibility of PCB cross-contamination.
- 38. Other users of transformers and capacitors containing PCBs such as hotels, airports, medium- or large-sized industrial facilities will not be able to cope alone with all the measures required by the Stockholm Convention without proper guidance, management and support. There are no testing facilities in the country to detect PCBs in oil and no

companies, which can provide complex services such as inventory taking, labeling, maintenance, transportation, storage and disposal of electrical equipment. The system of certification of hazardous waste management companies have to be developed in order to give the owners of PCB-containing equipment a possibility to receive the qualified assistance. PCB storage locations should also be identified and improved for the interim storage of PCBs and PCB-containing equipment, which were decommissioned by the minor users.

39. There are some industrial hazardous waste incinerators in Romania, which are listed in Table 2 below. Their capabilities of PCBs incinerating in an environmentally sound manner have to be confirmed.

Table 2: Characteristics of industrial hazardous waste incinerators

No	Title holder (Operator)	Designed capacity	Installation type (with or without energy recovery)	Investment value (USD)	Type of waste incinerated	Year (authorizat ion obtained)	Quantity of waste incinerated
1	SC OLTCHIM SA Ramnicu Valcea Krebs Section	18,000 t/yr	With energy recovery	4.2 million	Chlorinated organic products	1999	8,000 t/yr
2	SC PETROBRAZI SA	21,600 t/yr	Without energy recovery	6.67 million	Sludge from wastewater treatment	2000	14,200 t/yr
3	SC ARPECHIM SA Pitesti Acrilonitril II	18,000 m ³ /yr	Without energy recovery	NA	Wastewater containing cyanides	2000	131,120 m ³ /yr
4	SC KOBER SA Piatra Neamt	1,000 t/yr	Without energy recovery	NA	Residual liquids from resins and other solid wastes	2001	NA
5	SC PRO AIR CLEAN SA Timisoara	3,232 t/yr	With energy recovery	6 million	Hospital waste and industrial hazardous wastes	2001	35.6 t/yr
6	SC MONDECO SRL Suceava	360 t/yr	With energy recovery	6 million	Hospital wastes and industrial hazardous wastes	2001	4.3 t/yr

NA –not available, Source: National Implementation Plan for the Stockholm Convention

40. Despite the fact that certain hazardous waste incinerators operate under capacity, this does not necessarily mean that it is the most feasible option for disposal. They have been initially designed to incinerate hospital wastes and cannot be used to incinerate PCB-containing electrical equipment. Moreover, the operating costs are higher than those in Western Europe resulting in the current policy to transport the PCB-containing equipment and wastes abroad. None of the hazardous incinerators have the license of the environmental authorities to incinerate PCBs or PCB-containing equipment.

41. The proper planning and coordination of PCB-phasing out and elimination will assist the incineration facilities to establish long-term contracts with the owners of the PCB wastes, thus reducing the disposal costs. The most optimal disposal options were not identified under Activity 2.3.2 of the PCB action plan of the NIP. Therefore, the first step in resolving the problem is the development of a countrywide detailed inventory for three demonstration areas. The results will be approximated for the whole country, thus providing the clear picture on the quantities of pure PCBs, PCB-contaminated transformer oils, PCB-containing wastes, etc. These figures are crucial for a cost-effective phase-out, the selection of technical options for disposal of PCB and PCB wastes in Romania. The quantities and composition will enable the country to set the right priorities and mechanisms to develop the appropriate management plan.

Project scenario

- The MSP builds on the PCB action plan of the NIP and addresses outstanding issues such as refining the PCB inventory, resource mobilization to withdraw and dispose of PCBcontaining electrical equipment and public involvement in the implementation process. With the GEF assistance, a comprehensive environmentally sound management (ESM) system will be developed through consensus of involved stakeholders, the government, public and private entities and NGOs and will be tested in selected demonstration areas. The ESM system will include all the necessary tools, guidelines and practices required for a successful operation. A feasible financial mechanism will also be developed, which will assist major and minor owners of PCBs to work jointly in the elimination PCB-containing equipment and disposal of PCB wastes. All the necessary legislation and guidelines will be developed to support the ESM system and the financial mechanism. Site inspection tools, methods for PCB testing, laboratories, data reporting formats, maintenance practices of the electrical equipment and field monitoring guidelines will also be developed as part of the ESM system. Trainings and workshops will be held at government and local levels, which will build the necessary technical expertise for the practical implementation of the ESM system
- 43. The inventory activities for the whole country would take several years because only limited activities were undertaken to assess oil transformers for possible contamination. The primary aim of the MSP is to develop the ESM system and initiate the necessary activities, which will lead, beyond the project, to the full country inventory. However, in order to calculate the necessary investments and time for full compliance with the Convention, the soonest implementation of an inventory estimate based on physical inspections is a crucial need. It will enable Romania to refine the actions of the NIP concerning PCBs and identify short, mid- and long-term goals in the removal of PCB-containing electrical equipment.
- 44. During the PDF-A phase, the needs to establish interim storages were identified as follows:
 - existing storages are very often in bad or at least insufficient conditions;
 - there are a lot of "minor" owners of PCB where a proper storage is not possible;
 - transportation for long distances of small quantities of PCB wastes is expensive;

- national disposal facilities are not sufficient and their establishment will take some more years. The only immediate available solution for proper disposal is to export abroad for safe destruction. The storage facilities will accumulate and prepare PCB wastes for transportation.
- cost-effective separation of different PCB waste types like liquids, solids, empty transformers or capacitors by the owners is not possible;
- interim storages could be a centre of competence for practical handling and testing of PCB devices;
- even after establishing national disposal facilities such interim storages could serve as collecting points for more economical disposal activities;
- licensed interim storages are easier to control than hundreds of wild storages;
- interim storages are to be installed considering occupational safety issues. It will reduce risks for human exposure;
- interim storages will have an ESM system and protective measures against accidents; and
- it is easier to organize the regular medical check-up of personnel.
- 45. Interim storages will be identified and measures to upgrade them to international standards will be developed. These facilities will be used to store decommissioned PCB-containing equipment and PCB wastes in an environmentally sound manner. These locations will also be open to minor users of PCB-containing equipment. Based on the inventory, the most feasible disposal option can be selected.
- 46. Three demonstration areas will be selected for the implementation of the ESM system and detailed inventories will be developed for these areas. PCB-containing equipment in the most critical condition will be collected and disposed of. The achievements of the field implementation measures at the demonstration areas will be available for implementation in other regions of the country.
- 47. The project will demonstrate a sustainable cooperation among the Government, public and private sectors and NGOs by involving them in the decision making process throughout the development of the ESM system and by providing additional financial resources for the implementation of the ESM. At the initial stage of the project implementation, the participating parties including central and local authorities, owners of PCB and other interested parties will sign an agreement defining obligations and contributions of the parties towards the installation and operation of a PCB management system at the demonstration areas.
- 48. The project implementation strategy will be based on the following issues:
 - established and well-defined cooperation among governmental bodies, local authorities, private sector and NGOs;
 - accountability of the project-related work and expenditures of all involved parties; and

- clearly defined monitoring indicators and methodologies throughout the implementation.

Project Objectives

49. The objective of the project is to reduce and eliminate the threats to human health and the environment posed by PCBs in Romania. It also aims to strengthen the country's national capacities to manage the PCB issues in an environmentally sound manner. It will create a financially feasible management system for safe and environmentally sound phase-out and disposal of PCBs and PCB-containing equipment. It will further test all the elements of this management system in practice in demonstration areas. These elements include the identification, labeling, safe collection, interim storage and disposal of PCB.

Outcomes:

- 50. The principal outcomes of the project, which are the medium-term development results that are achievable within the timeframe of the project and are the logical consequences of achieving a specified combination of outputs, are as follows:
 - a. capacity to solve the PCB issues at the country level through strengthening of institutions and infrastructure;
 - b. an environmentally sound PCB management system by developing and adopting policies, guidelines and financial instruments for management and disposal of PCBs;
 - c. replicable programme for PCB management for national or international use;
 - d. reliable PCB inventory at the demonstration areas, and detailed countrywide PCB inventory;
 - e. identified PCB disposal options and facilities;
 - f. removal and disposal of PCBs and PCB-containing equipment from the demonstration areas; and
 - g. public awareness and well-trained technical personnel involved in PCB management.
- 51. The project outputs, which are the short-term development results and are the immediate consequences of the project activities and inputs are as follows:
 - Project coordination
 - Strengthened institutions and ESM system
 - PCB management at the demonstration areas and practical implementation of the ESM system
 - Countrywide plan of actions for PCB elimination
 - Adherence to the Project Document and public awareness
- 52. The project consists of three main phases, which will be implemented one after the other.

- 53. *The first phase* is related to organizational, awareness and training activities. It will result in the establishment of the Project Steering Committee (PSC) and agreed plan of actions. The identified concept of environmentally sound management of PCB will be achieved through the development of different alternatives and round table discussions by the involved parties. Phase I will also identify the demonstration areas through negotiations with local authorities. The outputs of Phase I will be a crucial input for the next components of the project.
- 54. During *the second phase* of the project, the environmentally sound management of PCB system will be established, which includes legal instruments, guidelines and practical tools for identification, labeling, maintenance, collection, transportation, storage and disposal of PCB-containing equipment and wastes. It will further establish the format for the PCB inventories as well as the reporting activities connected to it. The countrywide detailed PCB inventory will also be developed based on the outputs of the third phase. Safety measures avoiding releases of PCB during the implementation of the ESM measures will be critically addressed. One of the crucial outputs of this phase will be the financial mechanism for the cooperation of all involved parties on the PCB issue.
- 55. The main output of *the third phase* is the implementation of the ESM system in the practical life. It will identify strengths and weaknesses of the system, which will be used to refine and amend the ESM system before the countrywide introduction. All PCB-containing equipment and wastes in the demonstration areas will be identified and labeled. The project initially targets to conduct 8,000 PCB tests, which include electrical equipment, wastes and contaminated soils. 80% of these samples will be collected from SC Electrica SA and the rest from private owners. An approximately 10% of the total number of transformers of the whole country, can give a sufficient degree of reliable data to develop an estimated countrywide inventory and action plan. The equipment and wastes, which are in the most critical condition will be collected and disposed of on a priority basis. The project is initially budgeted to remove 300 tonnes of PCB-containing equipment, which provides enough data to confirm the ESM system and enables the development of the PCBs action plan. During this phase, the identified interim storages in the demonstration areas will be upgraded to international standards. Environment monitoring measures will also be introduced at these locations.

Activities:

The activities to reach these outcomes are as follows:

Output 1: Project Coordination

Activity 1.1: Establishment of the Project Steering Committee and definition of responsibilities and work plan

56. A PSC will be established. Members will be nominated at the governmental level. The Committee will oversee the activities of the project and the project teams. It will review, comment and approve the work plan. Strong emphasis will be put on private sector and

civil society involvement during the project execution. All decisions of the committee, such as respective responsibilities, timelines and the budget will be clearly communicated to the concerned participants of the project. Activities that require expertise but not available in the NEA, will be carried out on subcontracts through public tenders. Submitted tenders will be reviewed and evaluated based on an established evaluation procedures and guidelines. It will include the review of all applicants' level of expertise, human and financial resources and work done in the required field. The mechanism of UNIDO procurement will be used for international purchases and subcontracting. PSC will coordinate the activities of the project with the World Bank project to permanently share the achieved results.

Activity 1.2: Presentation of the government strategy in phasing out of PCBs, ongoing activities as well as the work plan of the project

57. After the setting up of the PSC and having informed the competent authorities, the inception workshop will take place to inform other stakeholders and potential owners of PCB about the project and its expected outcomes. Approximately 150 participants will be invited. The workshop will launch the activities and start discussions on the ESM measures and on the selection process of the demonstration areas. Task teams will be identified, which will develop the technical papers required for the first phase of the project.

Activity 1.3: Development of alternative for environmentally sound management of PCBs including economic incentives to support the phasing out of PCBs

- 58. Before the 1st Round Table discussion, a task team will elaborate different economic alternatives for the PCB management. It may include tax alleviations or direct financial support of those that could commit themselves to phase out PCB-containing equipment. The refining of the legislation might be required and might also raise the following questions:
 - how can a process be developed that allows competent authorities to actively participate in the PCB management?
 - how to ensure co-operation between the authorities and the owners of PCBs?
 - how can local communities directly participate in the disposal and awareness process?
 - what improvements can be introduced in the relevant legislation/regulation?
- 60. These concept papers will be the starting point at the 1st Round Table discussion and will be submitted to all participants before the discussion.

Activity 1.4: Identification of preferred incentive involving government stakeholders, major PCB users and representatives of local governments

61. A two-day 1st Round Table discussion workshop will take place to reach an agreement on what management option will be the most suitable and supported by stakeholders. The designated task team will refine the selected framework incentive to be approved by the PSC. The meeting also aims to map what kind of commitments the concept and the project can get from the participants.

Activity 1.5: Discussions with the representatives of the local authorities for the selection of the demonstration areas

62. Representatives from the local authorities will be invited for a two-day discussion, which aims to raise awareness on the project and finalize the criteria for the selection of the demonstration areas. A demonstration area will cover a whole county as each has it's own local authority and Environmental Protection Agency (EPA). These administrative entities provide a sound basis for the implementation of foreseen activities in a specific county. A list of criteria including the geographical location of the county, its industries, its human resource capacities in managing PCBs, its availability of possible storage locations, its specific problems concerning PCBs, and its potential contribution to the project will be presented to the participants. In order to become a demonstration area, the local authorities concerned will have to accept the commitments. Participants will be asked to describe how they can support the project and the planned activities at the demonstration areas. At the end of the meeting the selection criteria will be finalized and submitted to the PSC for approval.

Activity 1.6: Selection of the demonstration areas

63. Local authorities jointly with the local EPAs will submit their proposals to the PSC. These proposals will address all the criteria identified in Activity 1.5. The selection of the demonstration areas will be decided by the PSC. At least three demonstration areas will be selected, which will represent 15 to 20 percent of the country. The information on PCBs in the demonstration areas will be extrapolated to the whole country with a high degree on reliability.

Activity 1.7: Development of a Memorandum of Understanding (MoU) with the local authorities of the selected demonstration areas

64. The PSC will identify the demonstration areas and a MoU will be signed by the NEA, PSC and the local authorities of the selected demonstration areas. The media will also be invited to inform the public.

Activity 1.8 Regular Steering Committee meetings

65. The PSC will have meetings in every third month and additional meetings will be held, if necessary. All decisions such as selection of the demonstration areas, laboratories for upgrading, interim storage locations, etc. will require the approval of the PSC. The working procedures of the PSC will be developed during their first meeting. A secretary will facilitate the work of the committee.

Output 2: Institutional strengthening and development of an environmentally sound management system of PCBs

Activity 2.1. Setting up task teams and training

66. Task teams will be set up for the different activities, which will be carried out under the institutional strengthening and capacity building component of the project. Task teams will be trained to upgrade their knowledge in the required fields such as identification of PCB devices, simple test facilities for transformer oils and other PCB-containing oils, proper waste handling and management of PCB-containing equipment and aspects of financial incentives for PCB management. The training will be based on international standards for handling and collection of PCBs.

Activity 2.2. Development of procedures for the identification of PCB-containing equipment

67. One of the task teams will develop guidelines to identify PCB-containing equipment. It will include procedures for sampling, use of the field test kits and on-site analytical equipment, forms for data collection and reporting.

Activity 2.3. Development of procedures for labeling electrical equipment

68. One of the task teams will develop a methodology for labeling electrical equipment according to relevant international guidelines. It will include the design and printing of the labels for (a) equipment from which samples were taken, (b) PCB free equipment, and (c) PCB-containing equipment.

Activity 2.4. Preparation of guidelines for good maintenance practices (human safety measures and cross contamination avoidance)

69. Guidelines will be developed jointly with the major users of PCB-containing equipment to protect human health and the environment during the maintenance of the electrical equipment. Standardized procedures will be developed for draining PCB contaminated oils from the transformers and its treatment. Existing regulations will be checked for suitability and regulatory gaps will be addressed. The project team will organize a meeting for national and international experts to discuss the requirements of safe disposal of PCBs in Romania and the applicability of the existing international standards.

Activity 2.5. Development of safety measures to prevent PCB releases to the environment from operational equipment

70. Task team will prepare a timetable with priority order for phasing out PCB-containing electrical equipment. The first priority will be given to leaking devices and those devices that are located in critical places (food processing industries, hospitals, schools, etc.). This activity will also establish the legal deadline for the phase-out process depending on the priority order.

Activity 2.6. Development of procedures for collecting PCB-containing equipment and a reporting format

71. One of the task teams will develop procedures for the collection of PCB-containing equipment and wastes including the registration of companies that can provide these

services to the PCB owners. Procedures for reporting of the collection and the regular updating of the inventory will also be developed.

Activity 2.7. Development of financial mechanisms for minor users of PCB to phase out contaminated equipment

72. Based on the results of the 1st Round Table discussion meeting, the NEA will develop a programme for the governmental economic incentives and/or assistance to minor users in identification, labeling and phasing out of PCB-containing equipment. This activity will result in the development and approval of the legal instruments by relevant authorities.

Activity 2.8. Development of financial mechanisms for major users of PCB to phase out contaminated equipment

73. Based on the results of the 1st Round Table discussion meeting, the NEA will develop a programme of the governmental economic incentives and/or assistance to major users in identification, labeling and phasing out of PCB-containing equipment and submit it through the PSC for approval as the legal instrument by the Government.

Activity 2.9. Discussions involving government stakeholders, major PCB users and representatives of local authorities and approval of the proposals

74. A three-day 2nd Round Table discussion meeting will be organized inviting 50 participants. Prior to the meeting, all technical documents prepared during this phase of the project will be disseminated to all participants. The meeting aims at reconfirming the acceptance of the incentives as well as identifying the weaknesses or errors before finalization.

Activity 2.10. Amendment of the legislation in accordance with the approved practices to improve legal framework for PCB management and disposal

75. Based on the comments of the 2nd Round Table discussion, the technical documents will be approved by the PSC. New legislations will be amended and enacted.

Output 3: PCB management at the demonstration area and practical implementation of the ESM measures

Activity 3.1 Detailed PCB inventory

- Activity 3.1.1. Meeting with the stakeholders of the selected demonstration areas, setting up local task teams and definition of the responsibilities and the work plan
- 76. A stakeholder meeting will take place to develop a detailed PCB inventory in the demonstration areas. The participants will include local authorities, major and minor users of PCB-containing equipment and NGOs. In order to have a pool of experts, approximately 30 people will be trained and five to eight local task teams will be formed at each demonstration area. Each task team will include 2 to 3 members, one member from the

major or minor owners of PCB equipment to enable access to the facilities, another will come from the local authorities and a third member to be selected by the NGOs. These task teams will carry out the activities in the demonstration areas and will report to the project team.

- Activity 3.1.2. Training on practical implementation of the ESM for personnel involved in PCB handling
- 77. The newly formed task teams will receive an intensive training prior to their fieldwork. The training will consists of two parts, a theoretical followed by a practical demonstration. This part of the training will be based on the guidelines and procedures, which have been developed during the Output 2 of the project. Special training courses will be provided for the fire-fighting brigades.
- Activity 3.1.3. Identification and upgrade of laboratories for testing oil samples
- 78. One or two laboratories will be identified in each demonstration area for the testing of the transformer oil samples. These facilities will be upgraded to meet the requirements of the project. Approximately 8,000 samples will be tested in the demonstration areas. The project foresees the purchase of two sets of testing equipment at each demonstration area.
- Activity 3.1.4. Identification of PCB-containing equipment and establishment of priorities for further actions
- 79. Based on the approved guidelines, the task teams will:
 - identify the equipment;
 - take samples from the equipment for testing;
 - document the status of the equipment; and
 - transport the samples to a designated laboratory.
- 80. Based on the laboratory results, a list of PCB-containing equipment will be developed. The transformer data will be registered in a special form, collected, processed and put into the database. Information on risk assessment measures (like age of the electrical equipment, status of the electrical equipment, etc.) will also be recorded. Electrical equipment in critical conditions will be prioritized for immediate action.
- 81. Task teams will provide the required data to the competent authorities that will follow up the activities. They will also inform the local fire-fighting brigade about all PCB containing devices.
- Activity 3.1.5. Labeling all tested electrical equipment
- 82. Task teams will label all equipment based on the officially approved format.
- Activity 3.1.6. Development of a detailed inventory of PCB-containing equipment and wastes

83. This activity will result on a detailed inventory of all PCB-containing equipment with specifications on quality, quantity and location condition at the demonstration areas. It will contain a priority list for phasing out.

Activity 3.2 Interim storage of PCB-containing equipment and wastes

Activity 3.2.1. Identification of possible interim storage locations

84. Task teams including experts in assessing storage facilities, will investigate all current locations in the demonstration areas that might be eligible for storing PCB wastes. This process involves on-site inspections, which include environmental risks, aspects of accessibility, distance to human settlements, water bodies, etc. Financial implication for upgrading the facilities will also be developed. These assessments will be submitted to the PSC.

Activity 3.2.2. Selection of interim storage locations within the demonstration areas

85. Based on the technical assessments of the task teams and after consultations with local authorities, the PSC will select the most suitable locations for the demonstration project. This selection will depend among others, on the support and commitment of the owners of the sites. After the selection of the most suitable sites, the local authorities and owners of the sites will sign a MoU for cooperation to upgrade the sites as well as for regular operation.

Activity 3.2.3. Upgrading the interim storages

86. Experts will develop a feasibility study to upgrade the storage locations to meet the requirements for environmentally sound safe storages of PCB wastes. The feasibility study will consider the design of the facility, emergency precautions, necessary infrastructures as well as human resources needed. Staff will be trained on handling PCB-containing wastes.

Activity 3.2.4. Development and introduction of environmental monitoring systems at the interim storage areas

- 87. A PCB monitoring system will be established in the selected storage areas. Possible contaminated areas will be checked and the exposure of the employees will also be monitored regularly. Inventory books controlled by local competent authorities will be provided and regularly updated. All transport of wastes will additionally be reported to the PSC during the project life and to the POPs focal point afterwards in order to fulfill the reporting requirements under the Stockholm Convention.
- Activity 3.2.5. Phase-out, collection and storage of PCB-containing equipment in the demonstration area
- 88. In Activity 3.1.4, PCB-containing equipment in the most critical condition will be identified. Each demonstration area will submit to the PSC the list of this equipment together with a detailed risk assessment. The PSC will consider and approve the phase-out

and collection activities. Tenders will be called for these pilot operations. NEA will select the pilot operation implementation team, preferably a commercial company experienced in hazardous waste management. Simultaneously with the collection and phase-out activities, tenders will be published for disposal operations. These operations will consider on-site wastes selection (PCB-oil, metal and copper parts) with selective disposal, re-use of the electrical equipment or off-site disposal. The most cost-effective solutions will be selected and tested. The practical experiences learned from the selected pilot operations will be crucial inputs for the development of the countrywide phase-out and elimination plan (Activity 4.2). These pilot operations will be executed under the leadership of this team in joint cooperation with the involved authorities. The PSC will also control these pilot projects. The above-mentioned activities will be limited to 300 tonnes of PCB-containing equipment, however, NEA will undertake efforts to obtain additional co-financing from the private enterprises to increase this volume.

Output 4: Countrywide plan of actions for PCB elimination

Activity 4.1 Countrywide detailed inventory estimation

89. Based on the activities stated in the Output 3 of the project, a countrywide detailed inventory will be developed. The lessons learned during the inventory operations at the demonstration areas will be used to develop a reasonable estimate of PCB- containing equipment and wastes for the country. These operations will also help define the timelines; human resources needed and costs of the countrywide inventory activities.

Activity 4.2. Countrywide phase-out and elimination options

90. Government Decisions Nos. 173/2000 and 291/2005 foresee the identification of the most feasible disposal options and interim storage locations. The task team will collect information on existing elimination technologies and disposal options where operational costs are essential. Based on the countrywide inventory, a detailed cost and benefit assessment will be prepared for the identified options. The most preferred options will be selected by the PSC.

Output 5: Adherence to the Project Document and public awareness

Activity 5.1 Regular monitoring and evaluation

- 91. ICIM will develop the baseline procedures for project monitoring and evaluation based on the performance indicators of the project. These practices are to improve the performance of the stakeholders as well as to safeguard adherence to the project document. The monitoring and evaluation plan in Annex VI elaborates the responsibilities of the stakeholders and the verification of the outputs. This plan will be adapted by the PSC during the start-up of the project.
- 92. UNIDO will conduct a regular evaluation of the quality of the implementation and proper use of the funds.

93. At the end of the project, a terminal evaluation report will be compiled on the lessons of the project monitoring and evaluation. It will include the quality of the achieved results versus the management practices, the corrective measures, which were taken throughout the implementation.

Activity 5.2: Final workshop and public awareness

- 94. A final workshop will be organized to discuss the terminal evaluation report and officially announce that the ESM system will be integrated in the legislation and enforcement system of Romania. Key stakeholders, representatives from the relevant government and regional authorities, public and private sectors as well as NGOs will be present. Other concerned parties including the media will also be invited to raise general public awareness.
- 95. The detailed work plan is attached in Annex I, while the project logical framework is elaborated in Annex II.

C.3. SUSTAINABILITY (INCLUDING FINANCIAL SUSTAINABILITY)

- 96. One of the main objectives of the project is to develop an economically sustainable mechanism as part of the ESM system to support the phase-out and disposal of PCB-containing electrical equipment. Sustainability will be achieved through the use of available national resources during the implementation of the operational measures, while the GEF resources will be exploited to create the necessary capacity and environment for these measures. PCB owners will provide the initial driving force for co-financing while funding mechanisms for major and minor users of PCBs will be developed as part of the ESM system. Funding mechanisms can be grants or loans or tax reductions, which will be available for on-the-ground interventions to subsidize the PCB management activities. The necessary technical and human resource capacity will be available to continue the activities by including the enforcement bodies in the activities, such as the Environmental Protection Agencies. The intention is to integrate the ESM measures and the project activities into the regular portfolio of the local authorities resulting in a countrywide implementation programme. This is specifically addressed under Output 5.
- 97. It is also foreseen that due to a more enabling legislative and financial environment, private sector will gradually engage in PCBs management

C.4. REPLICABILITY

- 98. The replicability of the project will be achieved through training programmes, innovative financial mechanisms, workshops and publications.
- 99. The capacity building will be achieved by providing trainings on certain project activities. International experts will conduct the trainings involving local staff and private sector representatives to serve as resources for future trainings and activities. The intention is to

- develop an integrated training programme as part of the ESM system. The training programme as well as the ESM system will be available through Internet and hard copies.
- 100. Through the roundtable discussions, innovative financial mechanisms will be developed. After the pilot implementation, these mechanisms will be available for the private sector to continue the activities and takeover the implementation of the ESM system.
- 101. Workshops and roundtable discussions will also be utilized to transfer knowledge. Workshop reports, newsletters, inventory reports will highlight the conclusions of the project implementation and specific activities. The final activity of the project will also involve organizing a workshop, which will announce the integration of the project into the activities of the enforcement bodies as a programme.
- 102. PCB inventory results as well as other technical information will be published in scientific papers and will be included in public awareness programmes beyond the project.
- 103. Specific actions, with work plan and budget, to foster knowledge transfer are elaborated in detail within the project description.

C.5 STAKEHOLDER INVOLVEMENT

- 104. During the PDF-A phase, field visits were launched to assist in the preparation and development of the MSP. During these missions, several consultations were undertaken with the possible stakeholders. These discussions highlighted that successful implementation can only be achieved if governmental entities, public, private and NGOs institutions are equally involved and represented in the development and implementation of the ESM measures.
- 105. The tentative list of these stakeholders is as follows:
 - National Research Development Institute for Environmental Protection (ICIM)
 - GEF Focal Point: Ministry of Environment and Water Management
 - National Environmental Protection Agency
 - Romanian Environmental Fund
 - Ministry of Foreign Affairs
 - Ministry of Public Finance
 - Ministry of Economy and Commerce
 - Ministry of Communications and Information Technology
 - Ministry of Agriculture, Forests and Rural Development
 - Ministry of Health
 - Ministry of Transport, Construction and Tourism
 - Local authorities (Environmental Protection Agencies, Health Authorities, Environment Guards, etc.)
 - Representatives of hazardous waste management companies
 - Representatives of owners of PCB-containing equipment or wastes (Public Power and Cogeneration PPC, SC Electrica SA and others)

- Chamber of Commerce and Industries
- Academia
- Relevant associations
- NGOs and women groups
- 108. In order to understand the concerns and views of the private sector, the project invites chambers and associations such as the Chamber of Commerce and Industries for the roundtable discussions to design the ESM system. They will also sensitize their members to participate during the implementation to be able to take over the activities beyond the project life.
- 109. Private sector will also be involved in the project through their assistance in the management of PCBs, such as transportation, packaging, loading and providing expert services such as inventory development or laboratory services for PCBs analysis. Private companies will be subcontracted through the procurement procedures of ICIM. Private companies, which have PCB-containing equipment will also be involved in the project as co-financing sources. The channel for the co-financing process will be agreed upon during the project start-up.
- 110. UNIDO will be the **Implementing Agency (IA)** for this project. UNIDO will work closely with NEA and will be responsible for overseeing the project budgets and expenditures, recruitment and contracting international consultants, procurement of equipment (when not done by the NEA) and project evaluation as well as the organization of independent audits to ensure the proper use of the funds. Financial transactions, auditing and reporting will be carried out in compliance with the national regulations and UNIDO procedures. UNIDO will appoint a Chief Technical Advisor (CTA), who will monitor the progress of the project implementation and will provide technical and organizational back up to the project team.
- 111. The **National Executing Agency (NEA)** will be designated to deliver specific inputs (services, expertise and procurement of equipment) to the project and produce specific outputs through an agreement between the NEA and UNIDO. NEA will be responsible for monitoring of the implementation of the activities to be financed by local donors. NEA is accountable to UNIDO for the proper use of the funds provided to it and for the quality, timeliness and effectiveness of the services it provides and the activities it carries out.
- 112. The National Research-Development Institute for Environmental Protection (ICIM) will be designated as the National Executing Agency (NEA) for this project. ICIM, a stable and experienced institution, is responsible for the development of new initiatives in environmental management. ICIM has been the national implementing agency of the Enabling Activities (EA) project where the NIP for the Stockholm Convention was prepared. ICIM will play a similar role in this proposed MSP.
- 113. Due to the future accession to the EU, Romania has established a network of the Environmental Protection Agencies (EPAs). After the successful implementation of the project, the Government of Romania will nominate local authorities to take over the

- activities. Therefore, the project aims to build capacity in EPAs and other main actors at local level to enable them to progressively broaden the activities.
- 114. Technical expertise of the NEA is listed in Annex III. NEA will be responsible for the day-to-day project implementation work and the timely and verifiable attainment of the project objectives.
- National Project Coordinator (NPC) on a full-time basis, who reports to the PSC, the NEA and UNIDO. The NPC will ensure adherence to the work plan, which will be finalized during the first phase of the project implementation. His/her main responsibilities will include advising on and monitoring of all technical aspects of the project implementation, preparing technical and financial reports to UNIDO and GEF, organizing meetings and appointments during the field evaluations, confirming the quality of the project's outputs as well as providing the financial control over the project execution. The NPC will work in close cooperation with the national POP's focal point and the CTA. The NPC will be responsible for the preparation of technical and financial reports to UNIDO; organize meetings and appointments during field evaluations and confirmation of the quality of the project's outputs.
- 116. The National Project Coordinator will *inter alia*:
 - sign a subcontract with the task teams, national experts and others for the terms set out in this project;
 - call principal stakeholders of the PSC to oversee and coordinate the successful project implementation;
 - establish an office within the premises of the NEA for the successful implementation of the project;
 - have a day-to-day responsibility for the management and coordination of the implementation activities including subcontracts, budgets and reporting to the PSC, NEA and UNIDO;
 - appoint national experts as necessary to undertake the various actions required during the course of the work, using the Terms of Reference agreed by the PSC and ensure the quality of their work;
 - provide a secretariat function to the PSC and stakeholder workshops;
 - report regularly to the PSC, NEA and UNIDO on the progress of the implementation and the disbursement of the funds.
- 117. During the implementation of this project, a **Legal Advisor (LA)**, working on a contractual basis will facilitate the execution of the proposed activities and handle all legal aspects such as procedures for tenders, contracts and agreement preparations.
- 118. **Task teams** will be established for certain activities. These task teams will consist of representatives of the stakeholders identified above. The NPC will work closely with the task teams to coordinate project activities and make the link between project administration and implementation as seamless as possible.

- 119. In each demonstration area, an operator of PCB management, who will be responsible to manage project related activities on behalf of ICIM, will be selected through ICIM's procurement process (Activities 1.6 and 1.7).
- 120. A Project Steering Committee (PSC) will be established and will act as the coordinating committee for the execution of this project. This entity will be the decision making body of the project. Someone at the General Director level or Secretary of State will chair it. Relevant ministries, one member from the Inter-Ministerial Committee, representatives of the major and minor owners of PCB, representatives from hazardous wastes management companies, and the NGO sector will also be members of the committee. The PSC will decide on the frequency of the meetings and its working procedures. The PSC will hold its regular sessions throughout the implementation, but additional meetings can be held if necessary. The PSC will oversee the project-related work of the NPC and the implementation team. The PSC will review, comment on and approve the work plan. All decisions of the committee, such as respective responsibilities, timelines and the budget will be clearly communicated to those concerned. Activities will be implemented through subcontracts. Submitted tenders, contracts and MoUs will be reviewed and evaluated by the PSC according to existing national procedures. Any major changes in the project plans or programmes will require approval from the PSC to take effect. PSC members will facilitate the implementation of the project activities in their respective organizations, ensure that cooperative activities are implemented in a timely manner and facilitate the integration of project-inspired activities into existing programmes and practices. Representatives of partner and co-funding organizations not represented in the PSC will be invited to attend the meetings as needed.

C.6 MONITORING AND EVALUATION

- 121. UNIDO will monitor and evaluate the implementation of the project in accordance with established UNIDO and GEF procedures. Monitoring and Evaluation (M & E) will be based on measurable performance indicators through verifiable points, which are elaborated in the context of each activity in Annex II.
- 122. An inception workshop will be organized to launch the project and will be attended by all project teams. Relevant government counterparts, co-financing partners, UNIDO representatives and identified stakeholders will be invited. During this workshop, stakeholders will also be briefed on the M & E measures.
- 123. A detailed schedule of the project review meetings will be developed by project management, in consultation with project partners and incorporated in the Inception Workshop Report. Such a schedule will include finalized timeframes for the PSC meetings, UNIDO reporting requirements (or relevant advisory and/or coordination mechanisms) and project related Monitoring and Evaluation activities.
- 124. *Monitoring:* The NPC will be responsible in the day-to-day monitoring of the implementation progress based on the project's work plan and its indicators. The indicators with their means of verification will be approved during the Inception Workshop, which will also be the first PSC meeting.

- 125. The CTA, on behalf of UNIDO, will be responsible to monitor the implementation progress. UNIDO will field monitoring and evaluation missions. During these missions policy-level meeting of the parties directly involved in the implementation of the project will be required. The first of such meetings will be held within the first three months of the project implementation. The CTA will also assists in making all involved parties be acquainted with the reporting procedures.
- 126. *Reporting:* The NPC will prepare a project Inception Report immediately following the Inception Workshop. The workshop report will include a detailed work plan and project budget for the first full year of implementation as well as a detailed narrative on the institutional roles, responsibilities, coordinating activities and feedback mechanisms.
- 127. The NPC will be responsible for the production of the Quarterly Project Review including Financial Report. This report is a UNIDO/GEF requirement and is the most important reflection of the progress of the project.
- 128. All elements of the project will be the subject of the evaluation measures of the Implementing Agency (UNIDO). This will include the Project Performance and Evaluation Review (PPER) and external evaluations. The mid-term project review will focus on the lessons learned from the current project experience including lessons about the project design, implementation and overall management. The final report prior to the end of the project will focus on similar issues but will give strong emphasis to the potential for project impacts beyond the initial objectives. Recommendations for follow-up activities will be included in each of these reports.
- 129. *Evaluation:* The evaluation will be based on the Quarterly Project Review/Financial Reports, technical reports, workshop reports and reports of the CTA. At least five UNIDO field evaluations will be carried out to safeguard project adherence to the work plan and the use of funds. The monitoring and evaluation plan is included in Annex V. These evaluations will determine the progress made towards the achievement of outcomes and will identify course correction if needed. The final evaluation will also look at impact and sustainability of results.
- 130. *Audit:* The project is subject to financial audits as required in accordance with the UNIDO/GEF rules and regulations.

D – FINANCING

D.1 FINANCING PLAN

131. Paragraph 2 of Article 13 of the Stockholm Convention foresees that the financial mechanism of the Convention shall provide the agreed full incremental costs of implementing measures for developing countries and countries with economies in transition.

- 132. To this end, the incremental costs of all activities of the project were assessed based on the "Evaluation of GEF Incremental Cost Methodologies"².
- 133. The baseline cost of USD 869,000 will be covered from the government and private sector resources, while the incremental costs, which provide additional global benefits directly related to the Stockholm Convention, will be financed from the GEF, government, private sector and UNIDO resources. The incremental costs matrix is attached as Annex VII.
- 134. The total project cost is US\$ 2.025 million where US\$ 1.0 million is GEF grant (including US\$ 48,000 expended for PDF-A). The detailed budget is given in Table 3.

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² Evaluation of GEF Incremental Cost Methodologies, GEF Evaluation Office, December 27, 2005.

Table 3: Detailed Budget

	Completion of major activities	Total (US\$)	Incremental Costs (US\$)							
			GEF	Romania	UNIDO					
1	Project Coordination									
	Setting up project coordination and defining									
1.1	the work plan	121,000	50,000	71,000						
1.2	Inception workshop	10,000	6,000	4,000						
1.3	Development of alternatives for ESM of PCBs	41,000	30,000	1,000	10,000					
1.4	1st Round Table Discussion	4,000	3,000	1,000						
	Discussions for selecting the demonstration									
1.5	area	3,000	1,500	1,500						
	Developing criteria for selecting the									
1.6	demonstration area	7,000	5,000	2,000						
	Development of a MOU with the local									
1.7	government of the selected demonstration area.	7,500	5,500	2,000						
1.8	Regular Steering Committee meetings	11,500	7,500	4,000						
Sub-to	otal	205,000	108,500	86,500	10,000					
2	Institutional strengthening and ESM system									
0.1	Setting up task teams and training of the task	25.000	20.000	5,000						
2.1	teams	25,000	20,000	5,000						
2.2	Developing procedures for identification of	15 000	9 000	7,000						
2.2	PCB-containing equipment and reporting Developing procedures for labeling the	15,000	8,000	7,000						
2.3	electrical equipment	15,000	8,000	7,000						
2.5	Preparation of guidelines for good practice for	13,000	0,000	7,000						
2.4	maintenance	27,000	22,000	5,000						
	Developing safety measures to avoid PCB	27,000	==,000	2,000						
	releases to the environment from working									
2.5	equipment	20,000	15,000	5,000						
	Developing procedures for collecting PCB-									
2.6	containing equipment, and format of reporting	16,000	8,000	8,000						
	Developing financial mechanisms for minor									
	users of PCBs to withdraw contaminated									
2.7	equipment	20,500	12,500	8,000						
	Developing financial mechanisms for major									
2.0	users of PCBs to withdraw contaminated	12.500	5 500	0.000						
2.8	equipment	13,500	5,500	8,000						
2.9	2 nd Round Table Discussion	4,000	3,000	1,000						
2.10	Amending the legislation	7,500	1,000	6,500						
Sub-to	-	163,500	103,000	60,500	0					
3	PCBs management at the demonstration area and practical implementation of the ESM system									
3.1	Detailed PCBs inventory									
	Meeting with the stakeholders of the selected									
3.1.1	demonstration area	33,000	30,000	3,000						

	Completion of major activities	Total (US\$)	Incremental Costs (US\$)								
			GEF	Romania	UNIDO						
3.1.2	Training on PCB equipment identification and PCB waste handling	117,000	80,000	27,000	10,000						
3.1.3	Identification and upgrade of laboratories	100,000	50,000	50,000							
3.1.4	Identification of PCB-containing electrical equipment	220,000	110,000	110,000							
3.1.5	Labeling all tested electrical equipment	120,000	65,000	55,000							
3.1.6	Development of a detailed inventory of PCB-containing equipment and wastes	40,000	20,000	20,000							
3.2.	Interim storage for PCB-containing equipment and wastes										
3.2.1	Identifying interim storage locations for PCB-containing equipment and wastes	20,000	15,000	5,000							
3.2.2	Selecting interim storage location(s) within the demonstration area	13,000	10,000	3,000							
3.2.3	Developing a plan for upgrading the interim storage(s) to meet international standards	172,000	115,000	57,000							
3.2.4	Developing and introducing environmental monitoring system at the interim storage area	94,500	89,500	5,000							
	Phase-out, collection and storage of PCB										
3.2.5	equipment in the demonstration areas	509,000	63,000	446,000	10.000						
Sub-to		1,438,500	647,500	781,000	10,000						
4	Countrywide plan of actions for PCBs elimination										
4.1	Countrywide detailed inventory	20,000	15,000	5,000							
4.2	Countrywide phase-out and elimination plan	22,000	17,000	5,000							
Sub-to		42,000	32,000	10,000	0						
5	Adherence to the project document and public awareness										
5.1	Regular monitoring and evaluation	113,000	55,000	58,000							
5.2	Final workshop and public awareness	10,000	6,000	4,000							
Sub-to	otal	123,000	61,000	62,000	0						
PDF-	4	53,000	48,000		5,000						
	GRAND TOTAL	2,025,000	1,000,000	1,000,000	25,000						

COST EFFECTIVENESS

135. Cost-effectiveness of the project in total is not applicable, however for certain measures, especially in the case of on-the-ground interventions, detailed cost-effectiveness and feasibility studies will be developed. Regular technical committee meetings and financial audits will safeguard the proper use of the project funds.

CO-FINANCING

- 136. The project co-financing is US\$ 1,020,000 of which US\$ 800,000 (in cash) is contribution from owners of PCB-containing electrical equipment and PCB wastes. ICIM has contacted industrial facilities and its efforts culminated the above-mentioned in-cash contribution. A sample written commitment of the major co-financing partners is attached as Annex VIII.
- 137. The Romanian Government will provide US\$ 200,000 (in-cash and in-kind contribution) through the MEWM. The in-kind contribution will be mobilized through the ICIM and local EPAs, which include salaries, transportation, communication costs, etc. The in-cash contribution will be mobilized directly through ICIM.
- 138. The expected contribution from UNIDO will be in-kind and would include staff salaries and preparation of technical reports.

Co-financing Source	CES			
Name of Co-financier	Classification	Type	Amount	Status
(source)			(US\$)	
Local industries through the	Private	Cash	800,000	confirmed
Ministry of Environment and				
Water Management				
Ministry of Environment and	Government	In-kind and	At least US\$	Expected with
Water Management, local	and private	cash	200,000	high
authorities of the				probability
demonstration zones and				
local industries				
UNIDO	GEF	In-kind	US\$ 20,000	confirmed
	Implementing			
	Agency			

139. Additional co-financing will be mobilized during the project implementation. To this end, meetings are planned to inform and increase the interest of donors, foundations, investment banks, companies/corporate, private sector or national banks to promote the proposed activities and investments. In order to link the industry with the investment banks and chambers, associations of the major industries will also be invited to project events. This will create interest and negotiations for increased co-financing.

140. In-kind contribution from local authorities and private enterprises in the selected demonstration areas will be mobilised through roundtable meetings. Based on the availability of these resources, the co-financing part of the budget will be revised and additional activities financed. Budget revisions will not modify the GEF contribution and its format. The project aims to reach an additional US\$ 1.5 million co-financing on top of the currently available co-financing. The actual co-financing will continuously be monitored throughout the project implementation and will be reported to UNIDO.

E. INSTITUTIONAL COORDINATION AND SUPPORT

E.1 CORE COMMITMENTS AND LINKAGES

Commitment of Romania

- 141. Romania has signed and ratified the Stockholm Convention on POPs. As Party to the Convention, the government of Romania has developed its National Implementation Plan in order to establish and prioritise objectives, measures and actions to achieve its obligations under the Convention. All national stakeholders participated jointly and proactively in this process and their joint efforts resulted in the establishment of a nonformal system of cooperative approach and strong commitments towards the implementation of the formulated needs and readiness to continue this cooperation by implementing the crucial measures of the NIP.
- E.2. CONSULTATION, COORDINATION AND COLLABORATION BETWEEN AND AMONG IMPLEMENTING AGENCIES, EXECUTING AGENCIES, AND THE GEF SECRETARIAT, IF APPROPRIATE
- 142. The World Bank has initiated a project on environmental management through the Ministry of Environment and Water Management. It will be implemented over five years and include the following components:

Component 1: Nitrates

- 143. This component will assist the government of Romania to implement the EU Nitrates Directive as well as selected measures under the Water Framework Directive related to nutrient pollution (nitrogen, phosphorous, potassium, etc.). It will build on the success of the GEF-supported Agricultural Pollution Control Project (APCP), a pilot activity currently under implementation in Calarasi county, which aims at reducing nutrients (nitrogen and phosphorous) from agricultural sources to the Danube River and Black Sea.
- 144. The following activities are proposed under this component:
 - <u>Support for remedial measures implementation of action plans for remedial interventions for public and private, small and medium-sized enterprises (SMEs) in each of the identified high priority natural zones;</u>

- <u>Support for the implementation of the Code of Good Agricultural Practices</u> to public and private farmers for adopting environmentally friendly agricultural practices, such as the planting of shelter belts, buffer strips, windbreaks, nutrient management, conservation tillage, etc.
- <u>Support for policy and regulatory framework and its implementation</u> including the harmonization of legislation with the EU Nitrates and Water Framework Directives and strengthening its regulatory and enforcement capacity;
- <u>Support for monitoring, reporting and impact analysis</u> at the local, judet and river basin levels through appropriate investments (equipment, etc.) and training, including a data reporting system;
- Support for Training and Demonstration (T&D); and
- Public awareness and replication.

Component 2: Contaminated Land

- 145. The issue of contaminated lands has long been a priority of the Government of Romania as reflected in the Romania *State of the Environment Reports* and the National Environmental Action Plans.
- 146. The following activities are identified for project support:
 - <u>Support to Soil and Sub-soil Office in MEWM</u> including elaboration of a policy and strategy for contaminated land addressing the institutional, financial, ownership and operational aspects of contaminated land management in an EU member state context;
 - <u>POPs PCB Stockpile Removal (GEF)</u> whereby a demonstration project for PCBs stockpile removal and destruction in an agreed priority site; evaluation of two POPs-related contaminated site remediation studies; mainstreaming the NIP into the overall environmental management programmes; and
 - EU grant co-financing support.

Component 3: Nature Protection

147. MEWM's priority with respect to nature protection is to ensure sustainable financing of nature protection while maximizing absorption of EU funds and meeting commitments of EU accession. A new law on Environmental Protection provides a framework for public funding of protected area management through an envisioned new "National Agency for Protected Areas and Biodiversity Conservation". In this context, during the project preparation, TA will be provided to help in the development of more specific financial and institutional arrangements. Support for the new Agency and co-financing for EU grant funds are envisioned under the project

Component 4: Institutional Investments

- 148. The institutional component of the loan targets potential support for a MIS; laboratory equipment and training to reach certification; support for environment staff training; and project administration.
 - 1. Safeguard policies that might apply: A safeguard category of FI is expected; however, A is also possible depending on the final investments included under the loan, especially related to the activities under contaminated lands.

2. Tentative financing

Source:	(in \$ million)
Borrower/Recipient	0
International Bank for Reconstruction and Development	50-100
Global Environment Facility	15-21
TOTAL	65-121

3. Contact: Karin Shepardson

Title: Senior Regional Coordinator

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ANNEX I – TENTATIVE WORK PLAN

AININI	LXI - TENTATIVE WORK PLAN		_																						
	DURATION OF PROJECT																								
	Activities	PF	ROJE	CT I	MON	THS	3																		
	Completion of major activities	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Project Coordination																								
1.1	Establishment of the Project Steering Committee				Γ																				
1.2	Inception workshop and training for all stakeholders																								
1.3	Development of alternatives for environmentally sound management of PCBs																								
1.4	1st Round Table Discussion																								
1.5	Discussions for the selection of the demonstration areas																								
1.6	Development of criteria for the selection of the demonstration areas				Γ																				
1.7	Development of a MoU for the local authorities of the selected demonstration areas																								
1.8	Regular PSC meetings																								
2	Institutional strengthening and ESM system																								
2.1	Setting up task teams and training																								
2.2	Development of procedures for identification of PCB-containing equipment																								
2.3	Development of procedures for labeling the electrical equipment																								
2.4	Preparation of guidelines for good practice for maintenance																								
2.5	Development of safety measures to prevent PCB releases to the environment from working equipment																								
2.6	Development of procedures for collection of PCB-containing equipment and format of reporting																								
2.7	Development of financial mechanisms for minor users of PCBs to withdraw contaminated equipment																								
2.8	Development of financial mechanisms for major users of PCBs to withdraw contaminated equipment																								
2.9	2 nd Round Table Discussion																								
2.10	Amendment of the legislation																								
3	PCBs management at the demonstration area and practical implementation of the ESM system																								
3.1	Detailed PCBs inventory																								
3.1.1	Meeting with the stakeholders of the selected demonstration area																								
3.1.2	Training on practical implementation of the ESM system																								
3.1.3	Identification and upgrade of laboratories for testing oil samples																								

3.1.4	Identification of PCB-containing electrical equipment, priorities for further actions											
3.1.5	Labeling all tested electrical equipment											
3.1.6	Development of a detailed inventory of PCB-containing equipment and wastes											
3.2.	Interim storage for PCB-containing equipment and wastes											
3.2.1	Identifying interim storage locations for PCB-containing equipment and wastes											
3.2.2	Selection of interim storages within the demonstration areas											
3.2.3	Development of a plan for upgrading the interim storages to meet international standards						_					
3.2.4	Development and introduction of environmental monitoring system at the interim storage area											
3.2.5	Phase-out, collection and storage of PCB-containing equipment in the demonstration areas											
4.	Countrywide plan of actions for PCBs elimination											
4.1	Countrywide detailed inventory											
4.2	Countrywide phase-out and elimination options											
5.	Adherence to the project document and public awareness											
5.1	Regular monitoring and evaluation											
52	Final workshop and public awareness											

ANNEX II – LOGICAL FRAMEWORK ANALYSIS

Purpose	Outcomes	Means of verification (monitoring mechanisms)	Assumption and risks
Capacity for Environmentally Sound Management of PCBs in Romania.	 Capacity to solve the PCB issues at the country level through strengthened institutions and infrastructure; An ESM system by developing and adopting policies, guidelines and financial instruments for the management and disposal of PCBs; Replicable programme for PCB management for national or international use; Reliable PCB inventory at the demonstration areas, and detailed countrywide PCB inventory; Identified PCB disposal options and facilities; Removal and disposal of PCBs and PCB-containing equipment from the demonstration areas; and Public awareness and well-trained technical personnel involved in PCB management. 	 Assessment reports on the performance of X number of people/institutions who participated in the capacity building programmes The ESM system published; Endorsement of the ESM system; MEWM integrates the ESM system into its regular activities; Quarterly financial assessments including generated co-finances Number of private companies, which join in. PCB inventory reports Updated PCB action plan Final disposal report 	 Assumptions Private owners of PCB-containing equipment will co-operate in the activities. Funding organizations will support the project Sufficient local expertise on which capacity buildings and other project activities can be built. The project will be successful and will be integrated under the MEWM or designee as a regular programme. Risks PCB related policy of the Government changes PCB disposal prices will increase Government and private sector cannot agree on the cost sharing of PCB related activities. Designee of the MEWM will not have enough capacity, especially human resources to integrate the ESM system into its regular activities.

Outputs/results	Target Indicators	Means of verification (monitoring mechanisms)	Assumption and risks
Output 1: Project Coordination	 Project management unit established at ICIM Project team selected and contracted PSC established and functioning; Detailed work plan with clear description of activities developed and agreed upon by all stakeholders Communication strategy prepared and implemented on three levels: with all stakeholders, with project team and with implementing agencies ESM concepts based on round table discussions MoU with the local governments of the demonstration areas Funds mobilization plan prepared. 	 Procurement files Minutes of meetings of the PSC (at least three meetings annually) Report of the inception workshop Minutes of the roundtable discussions ESM concept papers (at least two alternatives for minor users and two for major users of PCBs) MoUs with the local authorities of the demonstration areas (three areas) Fund mobilization plan for minor and major PCB users 	 Assumptions: Commitment in ICIM to establish the management structure UNIDO's assistance in setting up project management structure ICIM has the necessary human resources and expertise in project management Risks: Those, who were initially involved in the project management leave ICIM, thus jeopardising the timely implementation Lack of transparency and improper information dissemination discourages the implementation process Lack of expertise in ICIM for developing resources mobilization discourages the private sector to take part in the project PSC members are too busy, which might delay implementation.
Output 2: Strengthened institutions and ESM system	 Capacity building programmes designed for ESM development. Capacity building programmes conducted. ESM system is developed and approved. Sustainable financial mechanism for all concerned parties are agreed and approved. 	 Training programme Training report, number of trained people ESM system is published Total number of institutions and human resources that were involved in capacity building activities categorised according to the list of stakeholders. 	 Assumptions: Successful implementation of Output 1. Human resources that participated in the capacity building activities are committed to work on the project activities.

Outputs/results	Target Indicators	Means of verification (monitoring mechanisms)	Assumption and risks
		- Financial mechanism is advertised and working.	 Private and government sectors are willing to work jointly and agree on the ESM system. Risks: Private and government sector will not agree on the ESM measures. Private and government sector will not agree on the sustainable financial mechanism. Lack of interest by the experts to participate in the project.
Output 3: PCB management at the demonstration areas and practical implementation of the ESM system	 Five to eight task teams are nominated and trained per demonstration area. One laboratory is selected in each demonstration area. 8000 samples tested (80% from Electrica SA, 20% from private owners). All tested equipment are labelled One interim storage site is selected, and upgraded in each demonstration area. 300 tonnes of PCB-containing equipment is disposed of. 	 Training reports Laboratory assessment report Inventory report for each demonstration area. Expert evaluation of the upgraded interim storage areas. Quarterly disposal reports 	Assumptions - Demonstration areas are selected. - Availability of the ESM system. - Financial mechanism is working effectively. Risks: - The disposal prices will rise above the costs calculated in the project. - No access will be granted to all privately owned electrical equipment.
Output 4: Countrywide plan of actions for PCBs elimination	 Countrywide PCB inventory estimate. Plan for countrywide inventory taking. Most feasible disposal option identified. 	PCB inventory report published.PCB action plan published.	Assumptions: - Three demonstration areas are representative enough to extrapolate to the whole country. - 95% accuracy of the PCB inventories of the demonstration areas.

Outputs/results	Target Indicators	Means of verification (monitoring mechanisms)	Assumption and risks
			 The PCB disposal prices will be steady. Risks: Change of Government policy towards the PCB issue. PCB disposal prices will increase.
Output 5: Adherence to the project document and public awareness	 M&E policy prepared and agreed upon. Monitoring mechanisms are in place as per the M&E policy. Private sectors financial contributions to the activities reach additional 1.5 to 1 ratio. Public raising awareness. 	 All required reports as per the M&E policy are available and in file. Quarterly Financial Reports including evaluation of cofinancing. Final workshop to inform the public undertaken. 	Assumptions - Based on the feedback of the M&E measurements, adaptive management measures to be taken all through the project implementation process. - EA should ensure that sufficient time and resources are available for better implementation of the M&E policy. Risks: - M&E mechanisms will not be fully followed, which jeopardises project implementation. - Co-finances will not reach the target level.

ANNEX III: DETAILED EXPERTISE OF THE EXECUTING AGENCY

The Research-Development National Institute for Environmental Protection (I.C.I.M.) is a national institute co-ordinated by the Romanian Ministry of Environment and Water Management and performs - based on economic contract - complex researches and studies in the field of environmental protection and engineering, with emphasis on the management of waters, air and eco zones.

ICIM is one of the largest and most vigorous environmental institutions in Romania. It is composed of strong, distinctive and coherent groups of researchers.

ICIM was founded in 1952.

• Number of employees: 320

• High studies employees: 156 of which 30 PhD researchers

• Turnover: US\$ 1.5 million per year

The institute is located in the northern part of Bucharest covering a surface area of 8 hectares. Laboratories (chemistry, hydraulics, physics), prototypes constructions and offices are placed in 5 different buildings.

Type of activities include:

- Theoretical Research and Studies
- Applied Research and Studies
- Field Measurement
- Consultancy
- Designing
- Erection of Small Size Prototypes (water and wastewater treatment plants)
- Manufacture of Hydrological and Meteorological Devices

ICIM's main field of expertise:

- Civil Engineering
- Chemistry
- Energetic
- Biology and Microbiology
- Mathematics
- Physics
- Geology
- Economics

The institute's activities focus on providing services in the following areas:

- Hydraulic Structures
- Environmental Engineering
- Sanitary Engineering (water, wastewater and solid waste treatment and disposal)

- Monitoring of the Environment
- Environmental Economics and Legislation
- Territorial Planning
- Urban Ecology
- Construction of prototypes
- Training
- Inter-calibration of laboratories in the Environmental Protection Agencies
- Expertise in the contentious situations

Integrated Monitoring of the Environment activities include, but not limited to

- Environmental Components Integrated Monitoring
- Air quality
- Water supply technologies
- Water pollution control
- Aquatic ecology and biodiversity
- o Fluid mechanics and pollutant dispersion
- Urban engineering and ecology
- o Solid waste management
- o Constructions environmental impact;
- o Constructions and disposal sites stability
- o Environmental legislation, economics and statistics
- o Industrial pollution

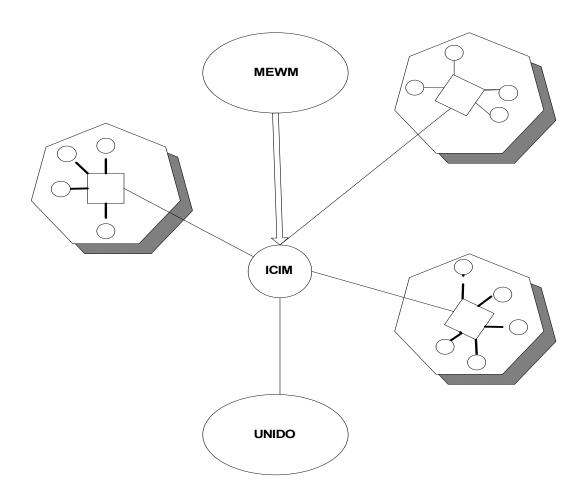
ICIM has implemented many projects, mostly with the assistance of International Organizations. They developed fruitful co-operation with UNIDO, Phare, the World Bank, RAMBOLL – Denmark, HALCROW - United Kingdom, HASKONING - The Netherlands, EPTISA – Spain, JAICA - Japan and GIB - UK.

The main topics of these co-operations were the development of national and local environmental action programmes, monitoring, laboratory analyses and data processing. National reviews and reports and assessment studies regarding the improvement of environmental management at local and central level were also implemented. Monitoring of transboundary pollution and the development of environmental legislations are also among their services.

Recent projects include:

- Development of the National Implementation Plan for the Stockholm Convention.
- Environmental Programme for the Danube River Basin: monitoring, laboratory analysis and pre-investment studies for Danube's tributaries.
- PHARE CORINAIR PROGRAM Management of a national network of information on pollutants emission into the atmosphere.
- Studies concerning the solutions for wastewater treatment plants and for drinking water treatment plants in about 20 towns.
- Environmental impact studies and audit for different activities as factories, airports municipalities (about 100-120 /year).
- Solutions for hydraulic structures and solid waste deposits.

Role of ICIM in the Project management



Coordination
Direct Contracts
— — Subcontracts
MEWM - Ministry of Environment and Water Management
UNIDO - United Nation Industrial Development Organisation
ICIM - National Research-Development Institute for Environmental Protection - ICIM
- Operator of PCB management system
- PCB Stakeholders
- Demonstration area

ANNEX IV: SUMMARY OF THE NIP

Romania has signed the Stockholm Convention on POPs in May 2001 and ratified it by Law No. 261 of 29 June 2004. As a Party to the Convention, the Government of Romania is aware of the health concerns resulting from local exposure to persistent organic pollutants (POPs), in particular impacts on women and through them, upon future generation. Twelve (12) substances are currently listed as POPs: aldrin, chlordane, DDT, dieldrin, dioxins, endrin, furans, hexachlorobenzene, heptachlor, mirex, PCBs and toxaphene. These substances posses toxic properties, resist degradation, bioaccumulate and are transported through air, water and migratory species, across international boundaries and deposited for from their place of release, where they accumulate in terrestrial and aquatic ecosystem.

The purpose of the National Implementation Plan (NIP) is to establish and prioritize objectives, measures and actions to reach the obligations of Romania under the Convention.

NIP contains mainly the list of objectives and measures, instruments, actions and projects set up to achieve the objectives. All these elements of the NIP have been prioritized taking into consideration the opinion of all stakeholders involved in the POPs management.

Level 1 activities (Measures) specific step necessary for the achievement of the key objectives (less concrete). These are technical, economical, institutional, procedural and informative measures.

Instruments are specific tools to be used for the implementation of measures, such as "command and control" environmental legislation, fiscal instruments, monitoring arrangements and enforcement regulations.

Level 2 activities (Actions) in the implementation of an individual measure or of a package of measures in order to achieve the objectives. An action is undertaken within a certain timeframe by an appointed and responsible party.

The national priorities associated with the POPs issues are:

- to eliminate the pesticides stockpiles and wastes;
- to eliminate the existing stocks of PCBs;
- to eliminate unidentified POPs (presumed to be POPs);
- to prohibit production of POPs and other substances that might be included in the POPs list in the future;
- to strive for sustainable development of ecological agriculture;
- to enhance the production and use of "cleaner" and more economical substances to be used for fighting against disease vectors and/or arthropods causing discomfort;
- to improve the environmental performances in the energy sector;
- to improve the environmental performance in the transport sector;
- to improve transport management in the urban sector;
- to improve the environmental performance in the industry sector;

- to reduce POPs emission nuisance from waste incinerators.

The measures that are to be taken in order to achieve the objectives have been discussed and prioritized according to the conclusions resulted from the discussion in workshops organized for this purpose.

The timetable of NIP implementation is laid down on a 25-year period divided into three sub-periods:

I: short-term: 1 to 3 years (2005 - 2007); II: medium-term: 4 to 10 years (2008 – 2014); III: long-term: 11 to 25 years (2015 – 2029).

Most activities and projects have already started in 2004 and will continue with the activities related to the reduction of unintentional production of POPs.

The total cost of NIP implementation is EUR 52.6 million of which:

- investments: EUR 28.4 million;

- domestic manpower: EUR 17 million; and

- foreign manpower: EUR 7.15 million.

To meet its obligations under the Stockholm Convention in the implementation of the NIP, not only the necessary funds should be available but also the required organisational capacity. More changes of ministries and other central or local authorities in a short period of time will hinder the organisational capacity.

ANNEX V: ABSTRACTS FROM THE PRELIMINARY INVENTORIES OF POPS IN ROMANIA

Assessment with respect to Annex A, Part II chemicals (PCBs)

PCBs are considered industrial POPs coming mainly from capacitors, transformers, batteries and other electrical equipment.

The lists of PCB-containing equipment in operation must be updated, completed and double-checked because some of the data are unclear (e.g. concentrations of PCBs in solutions on capacitors that are in operation in the counties of Arad, Dambovita or Dolj, etc.), some of the counties are missing (e.g. the counties of Alba and Brasov, the municipality of Bucharest, etc.) and some of the data are wrong (e.g. information in the case of Brasov county).

In order to make no further confusion, the existing data at MEWM have been presented as originally indicated.

The distribution of the electrical equipment containing PCBs in Romania is shown in Table 1 below. About 64.4 percent of the equipment is under operation and 35.6 percent are kept in warehouses.

Transformers and capacitors out Transformers and capacitors Nr. of use under operation Region crt. Pieces Liters Pieces Liters North-East 1. 9,755 106,259 20,065 145,962 BACĂU 2. South-East 11,853 63,094 9,465 230,314 GALATI 3. South PITE\$TI 6.999 86,309 898.823 21,759 4. South-West 5,705 66,474 14,402 169,175 CRAIOVA 5. West TIMIŞOARA 293,239 7,663 6,524 111,246 6. North-West CLUJ 2,445 12,068 5,225 43,029 7. 89.097 Central SIBIU 4,458 31,968 9.439 8. 4,291 **BUCHAREST** 32,940 6,219 42,181 TOTAL 52,030 510,358 94,237 1,911,820

Table 1 - Centralized PCB data in Romania (2004)

Observation:

More data are needed to complete the list of PCBs inventoried up to now (some additional checking of stocks).

According to Governmental Decision No. 291/2005 on the management and control of PCBs, the deadline for using out of use PCB-containing equipment in concentrations between 50 – 500 ppm and volumes higher than 5 dm³ is set for 31st December 2010 while for PCB-

containing equipment in concentrations lower than 50 ppm and volumes higher than 5 dm³ is until their useful life.

Projected POPs production, use and unintentional releases (in tonnes)

РСВ	2002/03 (Baseline Inventory)	2005	2010	2020	2030
Production	-	-	-	-	-
Use (in use and wastes)	749	700	534	220	0
Closed and semi-closed applications	576	500	334	220	0
Open applications	-	-	-	-	-
Polychlorinated biphenyls (PCBs)	214130	186200	124133	55170	0

Overview of the current practices, inventories or legislation

PCBs are present in electrical equipment namely transformers, capacitors and batteries. Parts of them are stored in deposits (being out of use) and some are still in operation.

The Central Environment Protection Authority (CEPA) elaborates, updates annually and publishes the national inventory of equipment and materials, which contain PCBs.

The total amount of PCBs inventoried in Romania in 2004 was 2,422 m³ of which 1,912 m³ are still in operation and the rest is deposited as waste. These quantities are included in the 146,267 pieces-transformers and capacitors, of which 94,267 are still in operation.

The main PCB stakeholders are from the industrial sector such as owners of electrical kilns, producers of electrical energy (for own use), electrical energy producers and transporters. There is no even distribution in Romania. For instance, the Regional Environment Protection Authority from Piteşti (south region of Romania) reported in 2004 the existence of 40.6 percent of the total amount of PCBs in Romania. That is why the required actions provided in the NIP will be concentrated in the zones where PCB presence is predominant.

The Territorial Environment Protection Authorities (TEPAs) give technical assistance to the PCB stakeholders in preparing their inventories, centralize the data at the county level and convey the data to CEPA for the preparation of the national inventory. TEPAs approve the plans of PCB elimination and inspect the equipment and materials containing PCB in their area of responsibility.

The existing domestic legislation regulates the regime of waste including PCBs and polychlorinated triphenyls (PCTs). GD 173/2000 on special regime of PCB and similar substances management and control, corresponds to CD 96/59/CEE – related to the elimination of PCBs and PCTs.

According to the Common Position of EU, Romania has been invited to provide the following information:

- to establish a National Plan for the elimination of equipment and materials containing PCBs/PCTs towards the end of 2005. Taking into account the schedule provided in Directive 96/59/CEE, this Plan will include phases of PCBs/PCTs elimination, starting with the equipment and materials out of use and temporarily deposited
- to update national inventory and review of the National Elimination Plan by the owners of the respective equipment and materials containing PCBs;
- to elaborate a list of components of equipment containing PCBs not yet inventoried. This equipment is to be selected in view of the elimination by the authorized companies. MEWM will elaborate the respective list in cooperation with the Ministry of Economy and Trade.

ANNEX VI: MONITORING AND EVALUATION PLAN

	Responsible	Means of verification	
Outputs/results	entity	(monitoring mechanisms)	Costs (USD) *
Output 1:	NEA	- Development of procurement files	600
Project Coordination	NEA	- Inception workshop report; (Submitted to UNIDO)	2,400
	PSC	- Minutes of the Round table discussions	300
	NEA	- ESM concept papers (at least two alternatives for minor users and two for major users of PCBs)	3,600
	NEA	- Three (3) MoUs with the local governments of the demonstration areas	1,800
	NEA	- Fund mobilization plan for minor and major PCB users (three alternatives for each)	4,200
	NEA	- Quarterly Project Review/Financial Reports which includes additional co-finances (submitted to UNIDO)	1,600
	CTA	- Field evaluation reports (five reports) **	-
	NPC	- Regular monitoring (two years)	84,000
		Sub-total:	98,500
Output 2:	NEA	- Training programme	3,000
Strengthened	NEA	- Training report	200
institutions, ESM system	NEA	- ESM system is published (submitted to UNIDO)	500
	NEA	- Technical report on the financial mechanism for major and minor users (two reports submitted to UNIDO)	300
		Sub-total:	4,000
Output 3:	NEA	- Training reports (one per each demonstration area)	900
PCB management at the demonstration areas and practical	NEA	- Laboratory assessment reports (one per each demonstration area)	1,200
implementation of the ESM system	NEA	- Compiled inventory report (submitted to UNIDO)	600
	NEA	- Technical report on the ESM implementation at the storage locations including finances	1,200
	NEA	- Quarterly disposal reports (submitted to UNIDO)	1,600
		Sub-total:	5,500

Output 4:	NEA	- Countrywide PCB inventory report (submitted to UNIDO)	500
Countrywide plan of actions for PCBs elimination	NEA	PCB action plan published (submitted to UNIDO)	500
Cimmution		Sub-total:	1,000
Output 5: Adherence to the	NEA and PSC	Monitoring and evaluation policy prepared and agreed upon;	800
project document and public awareness	NEA	- Mid-term project review (submitted to UNIDO)	800
paone a mareness	NEA	- Terminal Evaluation (submitted to UNIDO)	800
	PSC	- Project Review Steering Committee Meetings reports (eight reports)	1,600
		Sub-total:	4,000
GRAND TOTAL			113,000

^{*} UNIDO monitoring and evaluation will come from the IA fee and are not included in the table

** This includes the evaluation of the technical reports submitted to UNIDO as well as ESM system, inventory reports of the demonstration areas, quarterly disposal reports, countrywide PCB inventory estimate and PCB action plan

ANNEX VII. INCREMENTAL COST ANALYSIS

		Base	eline	Alternat	ive
	Project Outputs	Domestic benefit	Global benefit	Domestic benefit	Global benefit
1	Project Coordination	 New legislations and enforcement practices. Limited funding mechanism is available. Funding requests are long and complicated such as EU funds. 	 Lengthy PCB removal and disposal due to less enabling environment Due to limited funds and lack of support from private sector, PCBs might be eliminated in non-environmentally sound manner, e.g.: transformer oils are used for heating, or as a substitutes for gasoline (negative global benefit). 	 Concerned parties are aware of the PCBs issue. Joint negotiation increases confidence in the private sector. Locally available financial mechanism fasten PCB elimination process. 	 Lessons learned form Government and private sector negotiation is available internationally. More enabling environment results faster adherence to the Stockholm Convention and EU obligations.
2	Strengthened institutions, ESM system	 Only key institutions are strengthened due to limited resources. Local authorities have limited capacity to enforce PCB related legislations. Occupational safety issues are not taken as priority. 	 Enforcement has positive impact on self-reporting of PCB-containing equipment, thus updated inventories are available internationally. Accuracy of the inventories are increasing. Due to 2010 EU deadline for withdrawal of PCB-containing equipment, PCB elimination gradually increases. 	 Well-trained human resources are available at the national and local level. Local authorities are fully capable of implementing the ESM system. Enhanced ability of the government to act jointly with the private sector in environment related issues. 	 Pool of PCBs experts at the international level increases. Accuracy of the inventory is very high and available globally. ESM system reduces the risk of accidents, fires, and spillages. Environment and human health protected.
3	PCB management at the demo area and practical implementation of ESM system	Due to lack of proper management system withdrawn equipment are handled environmentally unsound.	- Not properly controlled PCBs withdrawal has negative impact on the global environment; more PCBs will be released into the environment.	 Controlled and planned activities allow better resources allocation. Increased awareness will result better compliance to the ESM system. 	 Removed pressure from the environment, Improved environment for the people. Fewer PCBs are released into to the atmosphere.

		Bas	seline	Alternat	ive
	Project Outputs	Domestic benefit	Global benefit	Domestic benefit	Global benefit
		- It is foreseen that activities will extremely fasten in the last two years before the EU deadline. If equipment is withdrawn in a hurry, less attention would be paid on the environment.	- It also has a negative impact on human health.	- With more financial resources, private sector engages into the elimination process.	- Strengthened private sector engages international market.
4	Countrywide plan of actions for PCBs elimination	 Limited accuracy of the PCBs inventory. Not necessary the most feasible elimination options are practiced. 	- The PCB action plan of the NIP has limited input for the global knowledge on PCB management.	 Realistic plan of action, which demonstrates the most feasible elimination process. PCBs are eliminated at lower costs than at the baseline scenario. Local authorities can plan to combine regular inspection with the investigation of PCB-containing equipment, which increases their effectiveness and proper use of the funds. 	 Faster adherence to the SC and EU regulations, due to the most feasible elimination option. It also secures that the elimination is done on a controlled manner and will not result in increased releases of POPs as listed in Annex C. Increased global knowledge on PCBs management.
5	Adherence to the project document and public awareness	 Proper use of local funds. Improved cooperation between central and local authorities. 	 Lessons learnt during the implementation of the NIP action plan is available internationally. Diverse approaches at the local level in PCB management might result in a new and effective alternative, which might have global significance. 	 Uniform approach in PCB management eases the coordination and evaluation of the implementation. Proper use of funds and timely implementation. Flexible implementation due to adaptive monitoring. 	 Proper use of international resources. Increase global knowledge on how PCBs might be addressed and how public and private partnership can take over PCB elimination activities.

During the incremental cost analysis not only the benefits of the baseline and project activities were considered. In many cases, activities might have detrimental effects on the environment and this was also included in the calculation of the incremental cost. For example in this case of EU deadline of 2010 for the withdrawal of PCB-containing electrical equipment (concentration higher than 50ppm), which might have negative impact on the global environment. It might put additional pressure on authorities and especially PCB owners and can result in the disposal of PCB-containing equipment in an environmentally unsound manner.

The key impact of the alternative project scenario, results form the joint action of the private sector and government bodies. By making owners of electrical equipment interested in the inventory and elimination process, the inventory figure might be higher, but the impact of the activities will have significant global impact. Proper awareness raising will also result in an environmentally conscious behaviour. This will gradually increase the implementation process without putting extra pressure and risks on the environment.

Summary of incremental costs matrix (in US\$)

	Increment				
	Project Outputs	Baseline	Alternative	GEF	Co- financing
1	Project Coordination	56,000	205,000	108,500	96,500
2	Strengthened institutions, environmentally sound management of PCB	53,000	162 500	103,000	60 500
3	PCB management at the demonstration area and practical implementation of the ESM system	750,000	1,438,500	647,500	60,500 791,000
4	Countrywide plan of actions for PCBs elimination	5,000	42,000	32,000	10,000
5	Adherence to the project document and public awareness	5,000	123,000	61,000	62,000
	GRAND TOTAL	869,000	1,972,000	952,000	1,020,000

ANNEX VIII. SAMPLE OF CO-FINANCING LETTERS FROM LOCAL INDUSTRIES

Samples of the co-financing commitments of the local industries are presented below. Please note that this is not the total list. All co-financing letters can be retrieved from ICIM.

Institutul Național de Cercetare Dezvoitare pentriu Protecție Mediului I.C.I.M. - 8UCUBEȘTI INTRARE OI Lune 12 Zine 0 7

CONTRACT DE COLABORARE

Încheiat la data de 02.12.2005

Între:

MINISTERUL MEDIULUI ȘI GOSPODĂRIRII APELOR, cu sediul în București, B-dul Libertății nr.12, sector 5 prin reprezentantul legal......,

INSTITUTUL NAȚIONAL DE CERCETARE DEZVOLTARE PENTRU PROTECȚIA MEDIULUI – ICIM Bucureşti, cu sediul în Bucureşti, Splaiul Independenței nr.294, sector 6, prin reprezentantul legal......

pe de o parte

Si

Subscrisa, S.C. UCM Resita S.A., cu sediul social în Resita, str. Golului, nr. 1, bl -, ap -, județul Caras Severin, înregistrată la Oficiul Național al Registrului Comerțului sub nr. J11/4/91, cod unic de înregistrare nr. 1056654, cont bancar nr. RO31RNCB210000000020001, deschis la BCR, sucursala Reşița, telefon 0255 217 111, fax 0255 223 082, e-mail: contact@ucmr.ro, reprezentat prin ADRIAN CHEBUŢIU – PREŞEDINTE-DIRECTOR GENERAL, în calitate de Beneficiar final al Proiectului "Dezvoltarea sistemului de management al bifeniiilor policlorurați în condiții corespunzătoare din punct de vedere al protecției mediului".

pe de altă parte

Luând în considerare faptul ca România a ratificat, prin Legea nr. 261/2004, Convenția privind poluanții organici persistenți, adoptată la Stockholm, la 22 mai 2001, iar una dintre măsurile prioritare asumate în conformitate cu prevederile Convenției vizează eliminarea utilizării bifenililor policlorurați în echipamente,

Ținând cont de necesitatea îndeplinirii obligațiilor de eliminare a bifenililor policlorurați de către agenții economici care dețin echipamente, deșeuri sau alte materiale ce conțin bifenili policlorurați (PCB) și alți compuși similari ai acestora, în conformitate cu prevederile planurilor de eliminare convenite împreună cu autoritatea competentă de mediu,

Amintind prevederile art.5 din Hotărârea de Guvern nr.173/2000 pentru reglementarea regimului special privind gestiunea şi controlul bifenililor policlorurații şi ai altor compuşi similari ai acestora, cu modificările şi completările ulterioare, conform cărora autoritășile publice de specialitate prin Secretariatul pentru compuşi desemnați elaborează, actualizează şi publică inventarul național al echipamentelor şi materialelor care conțin compuşi desemnați, iar autoritățile teritoriale de protecția mediului aprobă planurile de eliminare a PCB- urilor şi controlează echipamentele având conținut în PCB,



întocmit cu sprijinul unui grup de experți UNIDO, implicați în realizarea Planului Național de Implementare a Convenției de la Stockholm, al cărui plan financiar prevede că valoarea totală a proiectului este de 2,5 milioane USD, din care finanțarea GEF este de 1 milion USD,

Părțile au convenit următoarele:

- Art. 1. Părțile se angajează să colaboreze în vederea obținerii aprobării pentru realizarea proiectului "Dezvoltarea sistemului de management al bifenililor policlorurați în condiții corespunzătoare din punct de vedere al protecției mediului", având drept scop crearea unui sistem financiar fezabil pentru eliminarea PCB- urilor fără efecte secundare asupra mediului, prin punerea în practică a sistemului de management aplicat și pregătirea extinderii acestuia la nivel național.
- Art. 2. În scopul mai sus menționat, Beneficiarul final se obligă sa asigure co-finanțarea proiectului cu suma de 150.000 EURO, conform acceptului de co-participare dat prin scrisoarea nr. 366/DQ 0040, transmisă la 15.04.2005, în conformitate cu prevederile planurilor de eliminare a PCB urilor, convenite împreună cu autoritatea competentă de mediu.
- Art.3. În vederea participării efective la finanțarea proiectului, în cazul în care Ministerul Mediului şi Gospodăririi Apelor şi Institutul Național de Cercetare Dezvoltare pentru Protecția Mediului ICIM București vor obține aprobarea acestuia de către GEF, Beneficiarul final se obligă în mod irevocabil să achite suma prevăzută la art. 2 în condițiile şi la termenele care vor fi stipulate în documentele proiectului, cunoscând faptul că neachitarea acestei sume periclitează întregul proiect şi asumându-şi întreaga răspundere pentru eventualele prejudicii cauzate.
- Art. 3. Ministerul Mediului și Gospodăriri Apelor se obligă să facă demersurile necesare pentru înaintarea către GEF a documentației de obținere a finanțării, inclusiv de actualizare și transmitere a scrisorii de susținere ("Letter of endorsement") a proiectului, iar Institutul Național de Cercetare Dezvoltare pentru Protecția Mediului ICIM București, în calitate de Agenție executantă, se obligă să pună în aplicare proiectul astfel încât să fie atinse obiectivele propuse.

MINISTERUL MEDIULUI ŞI GOSPODĂRIRII APELOR

Prin: MINISTRU Sulfina BARBU

INSTITUTUL NAȚIONAL DE CERCETARE DEZVOLTARE PENTRU PROTECȚIA MEDIULUI – ICIM București, Prin: BENEFICIAR FINAL

U.C.M.REŞIŢA-S.A. Prin:

Reprezentant legal

ADRIAN CHEBUTIU

CONTRACT DE COLABORARE Încheiat la data de

MINISTERUL MEDIULUI ŞI GOSPODARIRII APELOR, cu sediul în Bucureşti, B-dul. Libertății nr.12, sector 5 prin reprezentatntul legal

pe de o parte

şi

Subscrisa , S.C. UZINA MECANICA PLOPENI S.A. - C.N. ROMARM S.A. BUCURESTI cu sediul social în PLOPENI , str. REPUBLICII , nr.1, județul PRAHOVA înregistrată la Oficiul Național al Registrului Comerțului Ploiesti sub nr. J29/162/2001 , cod unic de înregistrare nr. R13741804/22.02.2001 având cont nr. R071BRDE300SV04345973000, deschis la Banca Romana de Dezvoltare Ploiești, tel./fax 0244 221 381/221 384, fax 02440 223 023/221 395, e-mail: Plopeni @ ump.ro, reprezentată legal prin dr.ing. Vasile PETRE în calitate de Beneficiar final al Proiectului

pe de altă parte

Luând în considerare faptul că România a ratificat, prin Legea nr.261/2004, Convenția privind poluanții organici persistenți, adoptată la Stokholm, la 22 mai 2001, iar una dintre măsurile prioritare asumate în conformitate cu prevederile Convenției vizează eliminarea utilizării bifenililor policlorurați în echipamente,

Tinând cont de necesitatea îndeplinirii obligațiilor de eliminare a bifenililor policlorurații de către agenții economici care dețin echipamente , deșeuri sau alte materiale ce conțin bifenili policlorurații (PCB) și alți compuși similari ai acestora, în conformitate cu prevederile planurilor de eliminare convenite împreună cu autoritatea competentă de mediu,

Amintind prevederile art.5 din Hotărârea de Guvern nr.173/2000 pentru reglementarea regimului special privind gestiunea şi cntrolul bifenililor policlorurați şi ai altor compuşi similari ai acestora, cu modificările şi completările ulterioare, conform cărora autoritățile publice de specialitate prin Secretariatul pentru compuşi desemnați elaborează, actualizează şi publică inventarul național al echipamentelor şi materialelor care conțin compuşi desemnați, iar autoritățile teritoriale de protecția mediului aprobă planurile de eliminare a PCB – urilor şi controlează echipamentele având conținut în PCB.

Având în vedere interesul comun al părților de promovare a proiectului "Dezvoltarea sistemului de management al bifenililor policlorurați în condiții corespunzătoare din punct de vedere al protecției mediului" identificat de Institutul Național de Cercetare dezvoltare pentru Protecția Mediului – ICIM București și întocmit cu sprijinul unui grup de experți UNIDO, implicați în realizarea Planului Național de Implementare a Convenției de la Stockholm, al cărui plan financiar prevede că valoarea totală a proiectului este de 2,5 milioane USD, din care finanțarea GEF este de 1 milion USD.

Părțile au convenit următoarele:

Art.1. Părțile se angajează să colaboreze în vederea obținerii aprobării pentru realizarea proiectului "Dezvoltarea sistemului de management al bifenililor policlorurați în condiții corespunzătoare din punct de vedere al protecției mediului ", având drept scop crearea unui sistem financiar fezabil pentru eliminarea PCB-urilor fără efecte secundare asupra mediului, prin punerea în practică a sistemului de management aplicat şi pregătirea extinderii acestuia la nivel national

Art.2. În scopul mai sus menționat, Beneficiarul final se obligă să asigure co-finanțarea proiectului cu suma de 200000 RON, conform acceptului de co-participare dat prin scrisoarea nr.4632, transmisă la 03.10.2005, în conformitate cu prevederile planurilor de eliminare a PCB-urilor, convenite împreună cu autoritatea competentă de mediu

Art.3. În vederea participării efective la finanțarea proiectului, în cazul în care Ministerul Mediului şi Gospodăririi Apelor şi Institutul Național de Cercetare Dezvolare pentru Protecția Meiului – ICIM București vor obține aprobarea acestuia de către GEF, Beneficiarul final se obligă în mod irevocabil să achite suma prevăzută la art.2 în condițiile şi la termenele care vor fi stipulate în documentele proiectului , cunoscând faptul că neachitarea acestei sume periclitează întregul proiect şi asumându-şi întreaga răspundere pentru eventualele prejudicii cauzate.

Art.4. Ministerul Mediului și Gospodăririi Apelor se obligă să facă demersurile necesare pentru înaintarea către GEF a documentației de obținere a finanțării, inclusiv de actualizare și transmitere a scrisorii de susținere ("Letter of endorsement") a proiectului, iar Institutul Național de Cercetare Dezvoltare pentru Protecția Mediului – ICIM București, în calitate de Agenție executantă, se obligă să pună în aplicare proiectul astfel încât să fie atinse obiectivele propuse.

MINISTERUL MEDIULUI ȘI GOSPODARIRII APELOR

BENEFICIAR FINAL

Prin: MINISTRU Sulfina Barbu

INSTITUTUL NATIONAL DE CERCETARE DEZVOLTARE PENTRU PROTECTIA MEDIULUI-ICIM Bucureşti Prin: Director General,

Director Corneran,

Avizează favorabil:

SECRETAR DE STAT Constantin Popescu

SECRETAR DE STAT Attila KORODI

SECRETAR GENERAL Mihail VORNICOV

Director General, Silviu STOICA

Direcția Jurididă

INCOP-ICIM/ BUCURES II.
Str. Splaini Independental Inc.294, Sect. 6
CENTRICAT IN PRIVINTA REALITATII
REGULARITATII SI LEGAUTATII
LESNIC MIHAI

Semnáturá.....

S.C. UZ. MEC. PLOPENI SA Prin: DIRECTOR GENERAL

Reprezentant legal :

DIRECTOR ECONOMIA

Vasile PETRE

Elena COSTAQHE

OFICIUL JURIDIC, cons.ir.

Nicolae RADU

05-12-2005 14:03 FROM: CONTRACT DE COLABORARE Inchelat la data de 16-01.2006 Projectulul Intre: MINISTERUL MEDIULUI ȘI GOSPODĂRIRII APELOR, cu sediul în București, B-dul Libertății nr. 12, sector 5 prin reprezentantul legal..... INSTITUTUL NATIONAL DE CERCETARE DEZVOLTARE PENTRU PROTECTIA MEDIULUI - ICIM București, cu sediul în București, Spialul independenței nr.294, sector 6, prin reprezentantul pe de o parte prin, în calitate de Beneficiar final al Prolectulul tug. Da Coulocu Diu. comun partilor de promoción 1844. Rosz BROF2405V-09532482400 Luênd In considerare taptul ca România a ratificat, prin Legea nr. 261/2004, Convenția privind poluanții organici persistenti, adoptată la Stockholm, la 22 mai 2001, lar una dintre măsurile prioritare asumate în conformitate cu prevederile Convenției vizează eliminarea utilizării biferiililor policionurați în echloamente, Tinând cont de necesitatea îndeplinirii obligațiilor de eliminare a bifeniiilor policiorurați de cătro agenții economici care dețin echipemente, deseuri sau alte materiale ce conțin bifenili policiorurați (PCB) al alți compuși similari ai acestora. In conformitate cu prevederile planurilor de eliminare convenite impreună cu autoritatea competentă de mediu, Amintina provodorile art.5 din Hotărârea de Guvern in 173/2000 pentru reglementarea regimului special privind gostiunea și controlul bifenlillor puliulorurați și al altor compuși similari al acestora, cu modificările și completările ulterlogie, conform cărora autoritășile publice de specialitate prin Secretariatul pentru compuși desermați elaburuză, actualizează și publică inventarul național al echipamentelor și materialelor care conțin compuși desemnați, lar autoritățile teritoriale de protecția mediulul aprobă planurile de eliminare a PCB- urilor și contrologza echipamentele avand continut în PCB, Având în vedere interesul comun părților de promovare a projectului "Dezvoltarea sistemului de management al bifenillior policiorurați în condiții corespunzătoare din punct de vedero oi protecției mediului", identificat de Institutul National de Cercetare Dezvoltare pentru Protecțio Modiulul - ICIM Bucureșii și PACE 2/4 10 JAN 2006 (TUE) 14:33 E. C. IASITEX S. A.

enderun planurilor de eliminare a PCB - urilor, convenite tr

Intocmit cu sprijinul unul grup de exporți UNIDO, împlicații în realizarea Planului Național de împlementere a USD, din care finanțarea GEF este de 1 milion USD,

Părțile au convenit următoarele:

Art. 1. Părțilo so angelează să colaborcze în vederea obținerii aprobării pentru realizarea projectului "Dezvoltarea sistemului de management al bifeniiilor policiorurați în condiții corespunzătoare din punct de vedere al protecției mediului", având drept scop crearea unui sistem financiar fezabii pentru eliminarea PCB- utilor fără ofecte secundare asupra mediului, prin punerea în practică a sistemului de management aplicat și pregătirea extinderii acestula la nivel naționat.

Art. 2. În scopul mai sus menționat, Beneficiarul final se obligă sa asigure co-finanțarea prolectulul cu suma de 39.220. Conform acceptulul de co participare del prin scrisoerea nr.................., transmisă autoritatea competentă de mediu.

Art.3. În vederas participării efective la finanțarea proiectului, în cazul în caro Ministerul Mediului şi Gospodăriiil Apelor şi Institutul Național de Cercetare Dezvoltare pentru Profecția Mediului – ICIM Bucureşti vor la art. 2 în condițiile şi la termenele care vor fi stipulate în documentelo proiectului, cunoacând feptul câ neachiterea acestei sume periciitează intregul proiect şi asumandu-şi intraga răspundere pentru eventualele

Art. 3. Ministorul Modiulul și Cospodăriri Apelor se obligă să facă demersurille necesare pentru Inaintarea câtre GEF a doctimentației de obținere a finanțării, inclusiv de actualizare și tranomitore a serisorii de susținere ("Letter of endorsement") a profectului, lar Institutul Național de Cercetare Dezvoltare pentru Protecția Mediului – ICIM Buourești, în calitate de Agenție executantă, se obligă să pună în aplicare projectul astfel încat să fie atinse

MINISTERUL MEDIULUI ŞI GOSPODARIRII APELOR

Prin: MINISTRU Sulfina BARBU

INSTITUTUL NATIONAL DE CERCETARE DEZVOLTARE PENTRU PROTECȚIA MEDIULUI – ICIM București Prin:

Director General,

MAC NACHTIA

BENEFICIAR FINAL

SC. I ASITEX SA /or

Prin: Reprezentant legat

ug. Sufficient A tocolesce

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PAGE 3/4

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ANEXA NR. 2.

CONTRACT DE COLABORARE

Incheiat la data de 16:01.2006

Între:

MINISTERUL MEDIULUI ŞI GOSPODARIRII APELOR, cu sediul în Bucureşti, S-dul Libertâtii nr.12, sector 5 prin reprezentantul legal.....

INSTITUTUL NATIONAL DE CERCETARE DEZVOLTARE PENTRU PROTECȚIA MEDIULUI - ICAN București cu sediul în București, Splaiui Independenței nr.294, sector 6 crin reprezentanțu pe de o parte

Subscrisa, S.C. TRACTORUL LATE, cu sediul social în BRASEV str TURNULU. 5

ar județui BRASEV inregistrată la Oficiul Mational al Registrului Comenului sub ni 108/16/199/mi
telefon 12.5533/0162 cont bancar ni 1004/16/199/mi
prin SERBAH ALLECT TUTU BRESTOR (aprent 12.79.83/0263 EUROM BANK SUCUrsala BRASEV
prin SERBAH ALLECT TUTU BRESTOR (aprent 12.79.83/0263 EUROM BANK SUCUrsala BRASEV
prin SERBAH ALLECT TUTU BRESTOR (aprent 12.79.83/0263)

Control de sita porto.

Luánd în considerare faptul ca România a ratificat, prin Legea nr. 251/2004, Convenția privind poluariti organici persistenti, edoptată la Stockholm, la 22 mai 2001, iar una dintre măsurile prioritare asumate în conformitate cu prevederile Convenției vizează eliminarea utilizării bifenililor policlorurăți în echipamenie.

Tinând cont de necesitatea indeplinirii obligațiilor de eliminare a biienililor policiorurați de către egenii economici care dețin echipamente, deșeuri sau alte materiale ce conțin bitenili policiorurați (PCB), și alti compuș similari ai acestore. În conformitate cu prevederile planurilor de eliminare convenite împreună cu autoritatea

Amintind prevederile art 5 din Hotărârea de Guvern nr.173/2000 pentru reglementarea regimului specia privind gestiunea și controlul biferililor policiorurați și ai altor compuși similari ai acestora, cu modificânte ș completărite ulterioare, conform cărora autoritășile publice de specialitate prin Sepretariatul pentru compus desemnati elaborează, actualizează și publică inventarul național al echipamentelor și materialelor care contin compuşi desemnați, iar autoritățile teritoriale de protecția mediului aprobă planunie de eliminare a PCE- uriio; și

Avand în vedere interesul comun parților de promovare a projectuiuli "Dezvoltarea sistemului de management al bifenililor policiorurați în condiții corespunzătoare din puncț de vedere al protecției mediului", identificat de Institutul Național de Cercelare Dezvoltare pentru Protecția Mediului - ICIM Bucurașii ș

informit cu sprijinul unui grup de experti UNIDO, implicati în realizarea Planului Nățional de Implementare a Convenției de la Stockholm, al cărui plan financiar prevede că valoarea totală a proiectului este de 2.5 minoane USD, din care finanțarea GEF este de 1 milion USD,

Părtile au convenit următoarele:

- Art. 1. Părțile se angajează să colaboreze în vederea oblinerii aprobării pentru realizarea projectului "Dezvoltarea sistemului de management al bifeniiilor policiorurați în condiții corespunzătoare din punct de vedere al protecției mediului", având drept scop crearea unui sistem financiari fezabit pentru eliminarea PCB- uritor fară efecte secundare asupra mediului, prin punerea în practică a sistemului de management zolical și pregătirea exfinderii acestuia la nivel național.
- Art. 2. În scopul mai sus menționat, Beneficiarul final se obligă sa asigure co-finanțarea projectului cu suma de. 50.000 evic... conform acceptului de co-participare dat prin scrisoarea nr. 5(8/20.09.2001 transmiss la. 10/11 10/00/11 convenitate cu preveder le planurilor de eliminare a PCB urilor, convenita împreună cu autoritatea competentă de mediu.
- Art.3. În vederea participării efective la finanțarea proiectului, în cazul în dare Ministerul Mediului și Gospodăririi Apelor și Institutul Național de Cercetare Dezvoltare pentru Protecția Mediului Clim București vor obtine aprobarea acestuia de către GEF, Beneficiarul final se obligă în med îrevocabil și a achite suma prevăzută la art. 2 în condițiile și la termenele care vor fi stipulate în documentele proiectului, cunoscând fapiul că neachitarea acestei sume periolitează întregul proiect și asumându-și întreaga răspundere pentru eventualele prejudicii cauzate.

Art. 3. Ministerul Mediului și Gospodăriri Apelor se obligă să facă demersurile necesare pentru înaintarea către GEF a documentației de obținere a finanțării, inclusiv de actualizare și transmitere a scrisorii de susținere ("Letter of endorsement") a proiectului, iar Institutul Național de Cercetare Dezvoltare pentru Protectia Mediului - ICIM București, în calitate de Agenție executantă, se obligă să pună în aplicare proiectul astfel încât să fie atirse obiectivele propuse.

MINISTERUL MEDIULUI ȘI GOSPODĂRIRII APELOR

Prin: MINISTRU Sulfina BARBU

INSTITUTUL NAȚIONAL DE CERCETARE DEZVOLTARE PENTRU PROTECTIA MEDIULUI CIM BUCUrești,

Prin:

Director General

BENEFICIAR FINAL

SC TRACTORUL UTS JA

Prin:

Reprezentant legal

SIRECTOR GENERAL YUREZ

ARECTOR ECONOMIC

BY LEVER LOREIA

XII 2005

1 4 DEC 2005

Annex IX: GEF Medium-Sized Project Review Criteria

1. Fit with respective focal area strategy:

The proposed project is consistent with GEF Operational Programme (OP14) and also in line with the GEF-4 POPs Strategy Objective 2 – "Strengthening capacity for NIP implementation" and Objective 3 – "Partnering in investments for NIP implementation".

The project responds to some priorities of the National Implementation Plan (NIP) that will reduce and eliminate PCBs and PCB-containing equipment and wastes as well as strengthening of capacity and awareness raising, which will enable Romania to meet its obligations under the Stockholm Convention on POPs.

2. Financing:

			Incremental		UNIDO
		Project	costs	Co-	Co-
	Completion of major activities	Total	(GEF)	financing	financing
1	Project Coordination	205,000	108,500	86,500	10,000
	Institutional strengthening and ESM				
2	system	163,500	103,000	60,500	
3	PCB management at the demonstration area and practical implementation of the				
	ESM system	1,438,500	647,500	781,000	10,000
4	Countrywide plan of actions for PCBs elimination	42,000	32,000	10,000	
5	Adherence to the project document	123,000	61,000	62,000	
	GRAND TOTAL	1,972,000	952,000	1,000,000	20,000

3. Co-financing:

	CO-FINANCING SOURCES			
Name of Co-financier	Classification	Туре	Amount	Status
(source)			(US\$)	
Local industries through the	Private	Cash	800,000	Confirmed
Ministry of Environment				
and Water Management				
Government of Romania	Government	In-kind and	200,000	Confirmed
through the Ministry of		cash		
Environment and Water				
Management				
UNIDO	GEF	In-kind	20,000	Confirmed
	Implementing			
	Agency			

4. Project Management Budget:

Component	Estimated Staff weeks	GEF (\$)	Other Sources (\$)	Project Total (\$)
Locally recruited personnel				66,000
- National Project Director	96	36,000		
- Administrative assistant	96		12,000	
- Financial consultant	48		18,000	
International recruited consultants	24	60,000		60,000
Office facilities, equipment and communications			30,000	30,000
Travel		10,000	25,000	35,000
Miscellaneous		2,500	11,500	14,000
Total project management cost		108,500	96,500	205,000

5. International and National Consultants:

Component	Estimated staff weeks	GEF (\$)	Other Sources (\$)	Project Total (\$)
Local consultants	96	36,000		36,000
International consultants	16	40,000		40,000
Total		76,000		76,000

6. Timeframe:

	Starting Date	Completion Date
Preparation	October 2005	July 2006
Implementation	January 2007	December 2008

7. Expected Impact:

The successful implementation of the proposed MSP will gradually reduce and eliminate threats posed by PCBs in the environment. Those PCB-containing equipment and wastes as well as PCB-contaminated sites, which are in the most critical conditions, will be handled as a priority. The project aims to establish a financial resource mobilization mechanism, which will enable its continuation as a programme.

8. Risk:

Risks	Mitigation measures
1. Lack of expertise in ICIM, which will delay project implementation.	Detailed ToRs for experts will be developed to secure timely implementation.
2. Lack of transparency and improper information dissemination.	Involvement of NGOs and private sector in the project management will provide transparency and proper public awareness.
3. Stakeholders will not agree on the ESM measures.	Development of technically and financially feasible incentives for the ESM measures jointly with the representatives of the private sector will greatly reduce the risk of disagreement. Involvement of investment banks in the preparation of ESM will favour agreement and guarantee the sustainability of the project.
4. PCBs disposal prices will rise above the costs calculated in the project.	Hazardous waste disposal facilities in Europe do not have enough quantity of wastes to dispose of, so increase in prices are very unlikely. Assistance from local EPAs, chambers and associations will be sought to gain access to all private facilities.
5. Lack of interests to participate in the project by experts and relevant public/private entities.	High-level officials and experts will be involved in the project steering committee.
6. M&E mechanisms will not be fully implemented and co-financing will not be reached.	Regular reporting and monitoring will facilitate corrective measures. Involvement of investment and private banks in the project from the very beginning will reduce risk of under co-financing.

9. Innovation: The project design is innovative due to the following reasons and elements:

The project will establish a complete management system for environmental issues, consisting of a legal framework, a set of guidelines, a core of trained staff, provision of PCB/storage/treatment facilities based on advanced technologies and environmental practice and a financial mechanism.

This is an innovative approach to an environmental problem, which is deferent to the currently accepted practice in the country, where the Government uses restrictive measures (norms, limits, etc.) to limit or prevent the pollution and wastes generation and enforce them mostly by fiscal measures (fines).

TERMS OF REFERENCE

1. Post: Chief Technical Advisor (CTA)

Duration: 6.0 w/m over the period of two years (including at least five visits to

Romania)

Background:

Romania has prepared its National Implementation Plan (NIP) for persistent organic pollutants (POPs). The NIP identified PCBs as one of the top priorities for immediate actions. The Government of Romania together with UNIDO developed a Medium Sized Project GEF proposal to undertake PCBS related activities in the country. As a part of this project an environmentally sound management of PCBs will be formulated through broad discussions in the country. Demonstration areas will also be identified, where the ESM measure will be implemented. The project duration is two years and will include regular monitoring and evaluation as per the project document. For these services an International Consultant is being sought. Monitoring and evaluation will be based on measurable performance indicators, which are elaborated in the context of each output of the project.

Duties and Responsibilities:

The Chief Technical Advisor will assist the National Executing Agency (NEA), and UNIDO and will undertake the following duties:

- (i) Review all reports and information relating to the project management to ensure proper coordination and harmonization in project implementation.
- (ii) Working together with the NPC and other relevant parties, to ensure that the project design is consistent with the logical framework analysis, such that proposed interventions are implemented to the success of the project.
- (iii) Provide overall technical assistance to all project stakeholders, relevant agencies, national and international experts so that they can undertake their duties in a responsible and informed manner.
- (iv) Undertake regular reporting to on project implementation and adherence to the work plan, budget as well as UNIDO and GEF guidelines.
- (v) Liaise with UNIDO on the measures, which will be undertaken, upon changes in the work plan or budget.
- (vi) Regularly monitor and report the co-financing status of the project
- (vii) Represent UNIDO on the meetings and workshops throughout the project implementation
- (viii) Undertake Project Performance and Evaluation Reviews (PPER)

Qualifications and requirements:

- Post-graduate degree in Chemistry or equivalent
- At least five years experience in the area of POPs;
- Significant experience in monitoring GEF projects;
- Proficiency in English language.

2. Post: National Project Coordinator

Duration: 2 years (Full time)

Duties and Responsibilities:

The National Project Coordinator (NPC) will inter alia:

(i) be responsible for the day-to-day management and coordination of the project activities including preparation of terms of reference for subcontracts, task teams and national experts; facilitate their work in accordance to the ToRs;

- (ii) establish an office within the premises of the National Executing Agency for the successful implementation of the project;
- (iii) provide a secretariat function to the PSC and stakeholder workshops;
- (iv) report regularly to the PSC, NEA, CTA and IA on the progress of the implementation, disbursement of funds and status of co-financing;
- (v) organize workshops and meetings in order to introduce to all relevant agencies and local communities the goals of the project and secure local commitment and endorsement of these goals; assist the CTA and international experts during field visits;
- (vi) promote coordination and collaboration among all agencies including data and information sharing among these agencies;
- (vii) responsible for working closely with local governments and authorities as well as the private sector and liaise with national agencies to ensure that the GEF intervention is practical and appropriate in the social, economic and institutional context; and
- (viii) secure government commitment to the project including the provision of government co-financing in the form of in-kind and cash contributions and
- (ix) perform any other related activities, if requested.

Qualifications and Requirements:

- Graduate degree in chemistry or environment related sciences or equivalent
- At least fifteen years experience in the area of environment management and POPs;
- Extensive experience in Romania, including both field assessments and work on management policies.
- Familiarity with GEF procedures and documents; and
- Proficiency in English language.

3. Post: International expert on PCBs management

Duration: 3.0 w/m over the period of eight months (including at least four visits to Romania)

Duties and Responsibilities:

The International expert on PCBs management will assist the National Executing Agency (NEA), NPC, and UNIDO on the following duties:

- (i) Work together with the NPC and CTA, to carry out the following tasks:
 - a. Training for the task team members for the development of the ESM system
 - b. Training on practical implementation of the ESM for personnel involved in PCB handling.
 - c. Identification of possible interim storage locations
- (ii) Regularly liaise and coordinate the activities of the task teams, which develop the ESM system and implement the measures of the ESM system.
- (iii) Provide on-site assistance during the implementation of the ESM measures in the demonstration areas.
- (iv) Provide assistance in upgrading the interim storage facilities and in implementing the ESM measures at those locations.
- (v) Undertake monthly reporting to the NPC, CTA and UNIDO on the completed, and ongoing services and task.
- (vi) Liaise with NPC, CTA and UNIDO on the measures, which will be undertaken, upon changes in the work plan or budget.
- (vii) Prepare mission reports after each on-site mission.

Qualifications and Requirements:

- Graduate degree in chemistry or equivalent
- At least fifteen years experience in the area of PCBs management;
- Extensive experience in Romania, including both field assessments and work on management policies.
- Proficiency in English language.

4. Post: International Expert on PCBs analysis

Duration: 1.0 w/m over the period of three months (including two visits to Romania)

Duties and Responsibilities:

The International expert on PCBs analysis will assist the National Executing Agency (NEA), NPC, and UNIDO on the following duties:

Identification of possible interim storage locations

- (i) Work together with the NPC and CTA, to carry out the following tasks:
 - a. Identification and upgrade of laboratories for testing oil samples
 - b. Training laboratory staff and field task teams on oil sampling and PCBs analysis
- (ii) Regularly liaise and coordinate the activities of the task teams, which develop the inventory on electrical equipment.
- (iii) Provide on-site assistance during the first samplings and PCB analysis.
- (iv) Undertake monthly reporting to the NPC, CTA and UNIDO on the completed, and ongoing services and task.
- (v) Liaise with NPC, CTA and UNIDO on the measures, which will be undertaken, upon changes in the work plan or budget.
- (vi) Prepare mission reports after each on-site mission.

Qualifications and Requirements:

- Post-graduate degree in analytical chemistry or equivalent
- At least five years experience in the area of PCBs analysis;
- Proficiency in English language.

PART III – RESPONSE TO REVIEWS

A - CONVENTION SECRETARIAT

GEF Secretariat MSP Agreement Review of 10 April 2006

Comment 1:

Country Drivenness:

The project is a priority for Romania as stated in its NIP. A copy of the draft NIP should be forwarded to GEFSEC, and a summary (1-2 pages) of the NIP provided in annex.

UNIDO response:

Summary of the NIP is included in Annex IV of the revised MSP.

Comment 2:

Program Designation and Conformity:

OP14 SP2 (not SP1 as stated. SP1 is specifically the NIP program).

UNIDO response:

The above has been modified accordingly.

Comment 3:

Indicators that relate to the business plan are required. Tons disposed of in the demo areas?

UNIDO response:

The following statement has been inserted in the document as follows: "Project initially targets to test 8000 pieces of equipment in three demonstration areas and to dispose of 300 tonnes of electrical equipment."

Comment 4:

Project Design:

The project proposes to conduct detailed PCB inventories, removal, and disposal in 3 demo provinces, thereby preparing the way for a future countrywide effort. This could be a valid approach, which builds capacity in the country progressively. I wonder however if the detailed inventory should not be conducted in the whole of the country, in order to avoid being in the position where we are right now after the NIP of not knowing exactly what the situation re PCBs is.

UNIDO response:

The following text has been inserted in the Project Scenario para 43 p 11: The inventory activities for the whole country would take several years because only limited activities were undertaken to assess oil transformers for possible contamination. The primary aim of the MSP is to develop the ESM system and initiate the necessary activities, which will lead, beyond the project, to the full country inventory. However, in order to calculate the necessary investments and time for full compliance with the Convention, the soonest implementation of an inventory estimate based on physical inspection is a crucial need. This will enable Romania to refine the actions of the NIP concerning PCBs and identify short-, mid- and long-term goals in the removal of PCB-containing electrical equipment.

Comment 5:

An incremental cost analysis is required, focusing in particular on EU accession (under which Romania needs to dispose of its PCBs by 2010 rather than 2028...)

UNIDO response:

Incremental costs analysis is included as Annex VII of the proposal.

Comment 6:

I see in the table provided that 2 incinerators for hazardous and hospital waste are operating well below capacity. Some discussion is warranted here. Is the policy framework in place?

UNIDO response:

The following text has been included under Baseline Scenario para 40 p 10: Despite the fact that certain hazardous waste incinerators operate under capacity, this does not necessarily mean that it is the most feasible option for disposal. They have been initially designed to incinerate hospital wastes and cannot be used to incinerate PCB-containing electrical equipment. Moreover, the operating costs are higher than those in Western Europe resulting in the current policy of transporting PCB-containing equipment and wastes abroad. None of the hazardous incinerators have the license of the environmental authorities to incinerate PCBs or PCB-containing equipment.

Comment 7:

Outcomes P12 numbered a-g do not match outcomes p13-20 numbered 1-5.

UNIDO response:

Outcomes and outputs have been separated in the revised version of the document. The text on para 50, p13 was revised as follows: The principal outcomes of the project, which are the medium-term development results that are achievable within the timeframe of the project and are the logical consequence of achieving a specified combination of outputs, are as follows:

- a. capacity to solve the PCB issues at the country level through strengthening of institutions and infrastructure;
- b. an environmentally sound PCB management system by developing and adopting policies, guidelines and financial instruments for managing and disposal of PCBs;
- c. replicable programme for PCB management for national or international use;
- d. reliable PCB inventory at the demonstration areas, and detailed countrywide PCB inventory;
- e. identified PCB disposal options and facilities;
- f. removal and disposal of PCBs and PCB-containing equipment from the demonstration areas; and
- g. public awareness and well-trained technical personnel involved in PCB management.

The project outputs, which are the short-term development results, and are the immediate consequences of the project activities and inputs are as follows:

- Project coordination
- Strengthened institutions and ESM system
- PCB management at the demonstration areas and practical implementation of the ESM system

- Countrywide plan of actions for PCB elimination
- Adherence to the project document

Comment 8:

Is "project closure" really an outcome?

UNIDO response:

Outcome No. 5 has been modified to Output No.5 as follows:

Adherence to the project document

Comment 9:

The choice of EA needs to be justified, beyond the statement of expertise of the EA. One would have imagined that the work to be accomplished by this project would be one done by an environment agency. Does the National Institute for Environmental Protection play a similar role?

UNIDO response:

The following text has been added under the Stakeholder Involvement, para 111 p 24:

The National Executing Agency (NEA) will be designated to deliver specific inputs (services, expertise and procurement of equipment) to the project and produce specific outputs through an agreement between the NEA and UNIDO. NEA will be responsible for monitoring of the implementation of the activities to be financed by local donors. NEA is accountable to UNIDO for the proper use of the funds provided to it and for the quality, timeliness and effectiveness of the services it provides and the activities it carries out.

The National Research-Development Institute for Environmental Protection (ICIM) will be designated as the NEA for this project. ICIM, a stable and experienced institution, is responsible for the development of new initiatives in environmental management. ICIM has been the national implementing agency for the Enabling Activities (EA) project where the NIP for the Stockholm Convention was prepared. ICIM will play a similar role in this proposed MSP.

Comment 10:

Sustainability (including financial sustainability)

This needs to be discussed. What are the expectations in terms of expansion from the 3 demo provinces to the whole country?

UNIDO response:

The sustainability chapter has been revised as follows: One of the main objectives of the project is to develop an economically sustainable mechanism as part of the ESM system to support the phase-out and disposal of PCB-containing electrical equipment. Sustainability will be achieved through the use of available national resources during the implementation of the operational measures, while the GEF resources will be exploited to create the necessary capacity and environment for these measures. PCB owners will provide the initial driving force for co-financing while funding mechanisms for major and minor users of PCBs will be developed as part of the ESM system. Funding mechanisms can be grants, loans or tax reductions, which will be available for on-the-ground interventions to subsidize the PCB management activities. The necessary technical and human resource capacity will be available to continue the activities by including the enforcement bodies such as the Environmental Protection Agencies. The intention is to integrate the ESM measures and the project activities into the regular portfolio of the local authorities resulting in a countrywide implementation programme. This is specifically addressed under Output 5.

It is also foreseen that due to a more enabling legislative and financial environment, private sector will gradually engage in PCBs management.

Comment 11:

Replicability:

I see no budget to support the activities related to promotion of replication.

UNIDO response:

Replicability part has been modified as follows:

The replicability of the project will be achieved through training programmes, innovative financial mechanisms, workshops and publications.

The capacity building will be achieved by providing trainings to undertake certain project activities. International experts will conduct the trainings involving local staff and representatives from the private sector to serve as resources for future trainings and activities. The intention is to develop an integrated training programme as part of the ESM system. This training programme as well as the ESM system will be available through Internet and hard copies.

Through the roundtable discussions, innovative financial mechanisms will be developed. After the pilot implementation, these mechanisms will be available for the private sector to continue the activities and takeover the implementation of the ESM system.

Workshops and roundtable discussions will also be utilized to transfer knowledge. Workshop reports, newsletters and inventory reports will highlight the conclusions of the project implementation and specific activities. The final activity of the project will also involve organizing a workshop, which will announce the integration of the project into the activities of the enforcement bodies as a programme.

PCB inventory results as well as other technical information will be published in scientific papers and will be included in public awareness programmes beyond the project.

Specific actions, with work plan and budget, to foster knowledge transfer are elaborated in detail within the project description.

Comment No. 12:

Stakeholder Involvement:

How will the project involve the private sector?

UNIDO response:

The following text has been included in the Stakeholder involvement chapter:

In order to understand the concerns and views of the private sector, the project will invite chambers and associations such as the Chamber of Commerce and Industries for the roundtable discussions to design the ESM system. They will also sensitize their members to participate during the implementation and to be able to take over the activities beyond the project life.

Private sector will also be involved in the project through their assistance in the management of PCBs, such as transportation, packaging, loading and providing expert services such as inventory development or laboratory services for PCBs analysis. Private companies will be subcontracted through the procurement procedures of ICIM. Private companies, which have PCB-containing equipment, will also be involved in the project as co-financing sources. The channel for the co-financing process will be agreed upon during the project start-up.

Comment 13:

Monitoring and Evaluation:

I would recommend dedicating a specific annex to the M&E plan. This should include a table showing who does what, with a budget (excluding UNIDO supervision which is covered by the fee).

UNIDO response:

A separate Annex VI has been included in the document, which elaborates the M&E activities mentioned under Output 5.

Comment 14:

The logframe includes many indicators. None of them with a baseline. I would recommend pulling a "results" table out of the LFM, with a limited set of quantitative or semi-quantitative indicators, maybe 1-2 per components, that would tell us if, ultimately, the project is a success or not. We also need to tell the reader clearly how much PCBs are directly addressed through this project (demo areas), and how much are indirectly addressed through planning (the rest of the country).

UNIDO response:

A completely new Logical Framework Analysis (Annex II) was developed and it includes explicit figures for PCBs that will be addressed in the demonstration areas.

Comment 15:

The "final report prior to end of the project" is usually referred to as Terminal Evaluation.

UNIDO response:

The terminology "Terminal Evaluation" is used as suggested.

Comment 16:

Where is the incremental costs analysis?

UNIDO response:

Incremental cost analysis (Annex VII) has been included in the document.

Comment 17:

The government commitment appears low. In particular, these is quasi no co-financing for "Project coordination" (\$130,000 from the GEF, \$1000 from GoR); there is no co-financing for Identification of PCB-containing equipment" (GEF \$320,000). Who will be doing that job? I would have imagined that it would be mostly government employees.

UNIDO response:

Project budget has been revised in consultation with the Romanian counterpart. The Government contribution to the above-mentioned activities has been increased.

Comment 18:

\$800,000 is stated to be provided from "local industries". More explanation is required to make this a credible claim. I find no expression of interest from these "local industries" in the documentation.

UNIDO response:

The following sentences have been included in the document as para 136, p 31:

The project co-financing is US\$ 1,020,000 of which US\$ 800,000 (in cash) is contribution from owners of PCB-containing electrical equipment and PCB wastes. ICIM has contacted industrial facilities and its efforts culminated the above-mentioned in-cash contribution. A sample written commitment of the major co-financing partners is attached as Annex VIII.

Comment 19:

How will Romanian government co-financing be mobilized? Finally, please make actual co-financing an explicit object to be monitored and reported to the GEF.

UNIDO response:

Co-financing (p. 31) and the M&E plan (Annex VI) have been modified to monitor and report the actual co-financing.

The following text has been included in the financing plan:

The Romanian Government will provide a contribution of US\$ 200,000 (in cash and in kind) through the MEWM. The in-kind contribution will be mobilized through the ICIM and local EPAs, which include salaries, transportation, communication costs, etc. The cash contribution will be mobilized directly through ICIM.

Comment No. 19:

Fee: note that funding for the CTA should come from the fee.

UNIDO response:

The budget has been revised and misleading data have been corrected.

Comment No. 20:

There is an ambiguous "M&E for GEF Agency" budget line that looks like it should be funded from the fee. A1.9 refers to monitoring by the CTA and the "UNIDO project manager". A position that is not defined anywhere. Who is this person?

UNIDO response:

Activity 1.9 has been moved under Output 5 and allocation for this purpose has been deleted accordingly as per revised budget.

Comment No. 21:

Consultation, Coordination, Collaboration between IAs, and IAs and EAs, if appropriate. None mentioned. The WB is preparing a large environment loan for Romania to support EU accession.

UNIDO response:

Possible collaboration with the World Bank project has been mentioned in the document.

B - OTHER IAS AND RELEVANT EXAS

UNEP comments and UNIDO response

General Comments:

In general, the proposal addresses important work to be done in Romania in the PCB field. However, the proposal needs major editing in terms of language, used abbreviations and acronyms, as well as consistency.

The comments of our colleagues from UNEP have been fully considered in the revised version of the project document.

Many of the comment from our colleagues from UNEP coincide with the comments from the GEF project manager and the introduced corrections/changes have been mentioned as follows:

Comment 1:

Page 3, Project Outcomes:

- general comment: These two paragraphs need further editing, as the description of the project outcome is vague and imprecise;
- specific comments: line 1: What kind of capacity is meant? Does the project build on existing capacity (in this case the project would aim at increasing capacity)?; line 2: What kind of system is meant? What is meant with "example of a system"? How exactly will the "example of a system make all concerned parties motivated and capable of fulfilling" the Convention's obligations?; line 4: ESM stands for "environmentally sound management". Therefore, the sentence starting with "The ESM will include ..." makes no sense; line 12: as mentioned above, ESM stands for "environmentally sound management". Also this sentence makes no sense. We would suggest revising this paragraph.

Comment 2:

Page 3: B – country ownership, 3rd paragraph, line 1: It is stated that the project reflects "national priorities set out in the NIP". This would also imply that an Action Plan on the ESM of PCBs based on the priorities was developed under the NIP, as required under the Stockholm Convention. However, on page 9 (3rd paragraph, line 8) it is stated that "a focused (PCB) inventory, which will enable the country to set the right priorities and mechanisms to develop the appropriate management plan" still has to be developed. Therefore, we assume that national priorities with regard to the ESM of PCBs are not yet defined. As this is inconsistent with the statement above, we suggest that a sentence should be inserted in page 3 stating that not all national PCB priorities were identified in the NIP and that further work needs to be undertaken.

UNIDO Response to Comments 1 and 2:

The overall goal of the project was defined as assistance to meet the obligations of the country under the Stockholm Convention in relation to environmentally sound management of POP wastes by collecting, safe interim storage for/and further disposal of PCB wastes and through this avoiding further contamination diffusion.

The proposed MSP will assist in achieving some other priorities, namely – improvement of the environmental performance in the energy sector and in the industrial sector.

The scope of the MSP was defined as consisting 5 basic components, including elaboration of a mechanism for decommissioning of PCB-contaminated equipment, which are currently in operation.

Comment 3:

Page 8, 3rd paragraph, line 1: It is stated that 3,391 tonnes of PCBs and PCB wastes were identified in the NIP. Is this the net or the gross amount? What is the composition of the PCB waste? How much PCBs oils were found? How much PCB-contaminated mineral oils were found? Was PCB-containing electrical equipment identified? We suggest annexing the findings of the preliminary PCB inventory.

UNIDO Response:

The volumes of PCBs in Romania have been calculated based on inventory conducted in 2003-2004. Clarifications have been added in the text of the proposal that the additional collection of data will be done only in instances when the volumes of data, collected in the course of the EA, are not enough for the purposes of drafting the MSP. In all other cases, the information contained in the NIP and the inventory of the EA will be used to define the scope of the MSP project. The project has not been designed to completely dispose of PCB and PCB-contaminated equipment, but to work out and demonstrate an environmentally sound and economically efficient mechanism at the selected areas (however, a limited volume of wastes will be disposed). Additional financial inputs will be required to make Romania a PCB-free country, which can be mobilized locally and through a larger GEF proposal as mentioned in the comments from the World Bank.

Comment 4:

Page 4, 4th paragraph, line 9: Supply points are not "know as distribution transformers", as stated in the text. Distribution transformers can be found at supply points.

UNIDO Response:

Above has been corrected accordingly in the document.

Comment 5:

Page 9, 3rd paragraph, line 6-8: It is mentioned that "the most optimal disposal options were not identified in the NIP. Therefore, the first step in resolving the PCB problem is the development of a focused inventory." What is meant with the expression "focused inventory"? It is unclear, how the development of a PCB inventory directly serves the objective of finding the best disposal options. What is meant with the expression "PCB problem" (pure PCBs, PCB-contaminated mineral oils, PCB-containing equipment, etc.)?

Comment 8:

Page 10, 2nd paragraph, line 1: What is meant with the expression "focused inventory" (see comment 5)

UNIDO Response to Comments 5 and 8:

The inventory activities for the whole country would take several years, especially because only limited activities were undertaken to assess oil transformers for possible contamination. The primary aim of the MSP is to develop the ESM system and initiate the necessary activities, which will lead, beyond the project, to the full country inventory. However, in order to calculate the necessary investments and time for full compliance with the SC, the soonest implementation of a

countrywide inventory based on physical inspections is of crucial need. This will enable Romania to refine the actions of the NIP concerning PCBs, identify short-, mid- and long-term goals in the removal of PCB-containing electrical equipment.

Comment 6:

Page 9, 3rd paragraph, line 9: according to this paragraph, one of the objectives of the project is to prepare a PCB management plan. Parties to the Stockholm Convention are required to prepare an action plan on PCBs as one of their obligations under the Convention. Was such an action plan developed under the NIP? If yes, does the above-mentioned PCB management plan build on this action plan?

UNIDO Response:

The most optimal disposal options were not identified under Activity 2.3.2 of the PCB action plan of the NIP. Therefore, the first step in resolving the PCB problems is the development of a countrywide detailed inventory for three demonstration areas in the region. The results will be approximated for the whole country, thus providing a clear picture on the quantities of pure PCBs, PCB-contaminated transformer oils, PCB-containing wastes, etc. These figures are crucial for the cost-effective phase-out, selection of the technical options for disposal of PCB and PCB wastes in Romania. The quantities and composition of the PCB-containing or contaminated articles and wastes will determine the most feasible elimination option.

Comment 7:

Page 10, 1st paragraph, line 2: What is meant with "to develop an environmentally sound management of PCB system?" The description of the "project scenario" is unclear and vague. We suggest revising this paragraph.

UNIDO Response:

The comments above have been taken into consideration accordingly.

Comment 9:

Page 11, 3rd paragraph after bullet points, line 5-6: How will the cooperation "among the private sector, the Government and NGOs" be secured?

UNIDO Response:

The cooperation among the private sector, the Government and NGOs will be secured by signing an agreement at the initial stage between central and local authorities, owners of PCB and other interested parties to define their obligations and contributions towards the installation and operation of PCB management system at the demonstration areas.

Comment 10:

Page 12, outcomes, f.: It is stated that removal and disposal of PCBs and PCB-containing equipment will be one of the outcomes of the envisaged project. However, no activities are described on the following pages 13-20 that would lead to this outcome. Furthermore, there is no budget foreseen for removal and disposal of PCB waste.

UNIDO Response:

Removal and disposal of PCBs and PCB-containing equipment and the budget are foreseen in Output 3, Activity 3.2.5.

Comment 11:

Page 42, list of: ESM does not stand for "environmentally sound management of PCBs" but only for "environmentally sound management"; CEE stands for Central and Eastern Europe"; POP stands for "Persistent Organic Pollutant".

UNIDO Response:

The above were corrected accordingly.

World Bank comments and UNIDO response

Overall, the proposal is fine and can be supported. Specific observations/comments are as follows:

Comments:

While the aim of the proposal is clear - to provide for collection, safe interim storage, and eventual disposal of PCB wastes - and is thus certainly responsive to the aims of the Stockholm Convention - the document could benefit from improved clarity. In the very first paragraph of Part 1, the project information section, which: (a) does not state fully what the overall goal is (later sections indicate that waste PCB collection, safe interim storage, and final disposal are all to be included); (b) sections of para. 1 are repetitive; and also make reference to "The draft NIP", when later sections make clear that this proposal is a follow-on activity to completion of the NIP (see para. 14).

The above confusion seems to carry over into the project tasks outlined in Part 2, para. 6, expected Outcomes/Costs... Project task 4 states "Prepare, execute and review PCB waste inventories". It isn't clear to what this means. For consistency and conformity with points made earlier in the document, the task should perhaps instead read something like: "Review, clarify, correct and complete the PCB waste inventory database".

UNIDO Response:

We thank our colleagues from the World Bank for the constructive comments, which guided us to revise the document accordingly. Following this, Part 1 of the document was substantially modified to include more evidences on the necessity of the MSP on PCBs.

List of Abbreviations

ANRE National Energy Regulatory Authority
APCP Agricultural Pollution Control Project

CEE Central and Eastern Europe

CEPA Central Environmental Protection Agency

COP Conference of Parties
CTA Chief Technical Advisor
EA Enabling Activities

EPA Environmental Protection Agency
ESM Environmentally Sound Management

EU European Union

GEF Global Environment Facility

ICIM National Research-Development Institute for Environmental Protection

IA Implementing Agency
M&E Monitoring and Evaluation

LA Legal Advisor

MEWM Ministry of Environment and Water Management

MoU Memorandum of Understanding

MSP Medium-Sized Project
NEA National Executing Agency

NEAP National Environmental Action Plan NGO Non-governmental Organization NIP National Implementation Plan NPC National Project Coordinator

OP Operational Program
PCB Polychlorinated Biphenyl
PCTs Polychlorinated triphenyls

PDF A Project Development Facility Block A

POPs Persistent Organic Pollutants

PPER Project Performance and Evaluation Review

ppm parts per million

PSC Project Steering Committee
PTS Persistent Toxic Substances
SD Sectoral Development

SME Small and Medium-sized Enterprise

TC Technical Committee

T&D Training and Demonstration

TEPA Territorial Environmental Protection Agency
UNEP United Nations Environment Programme

UNIDO United Nations Industrial Development Organization